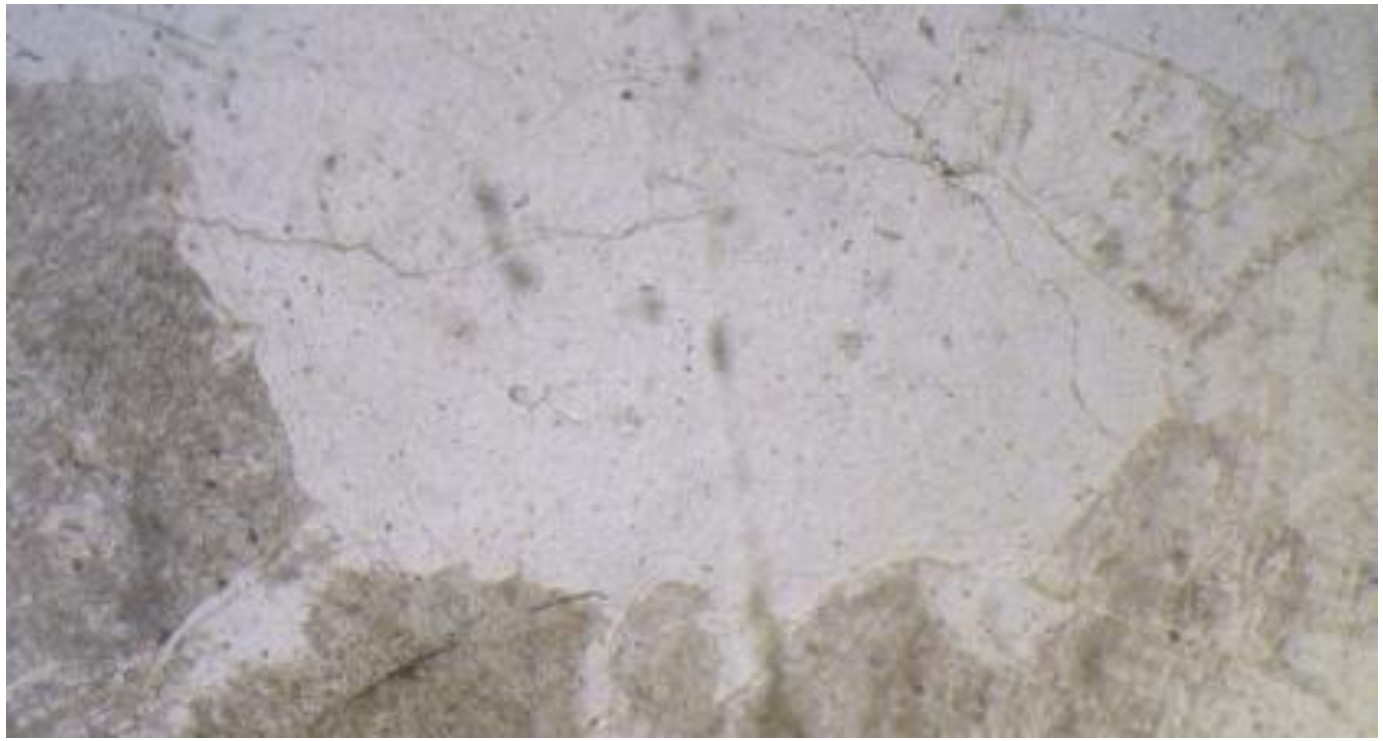
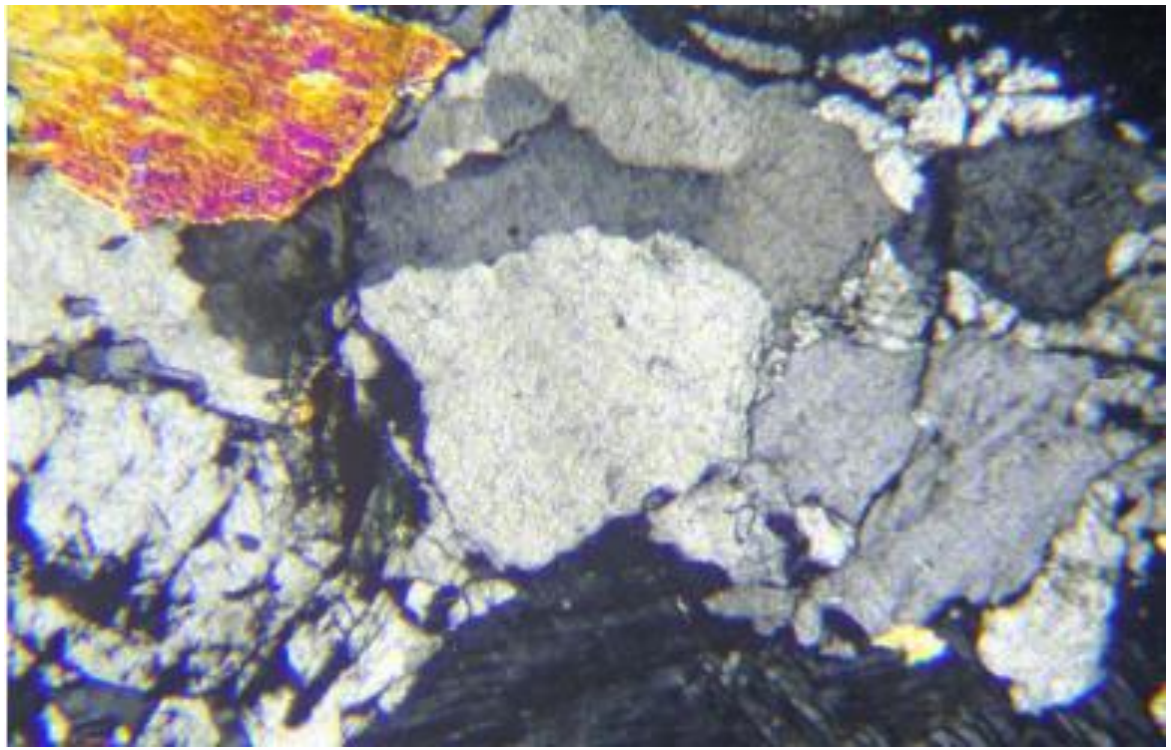
Mineralogia Óptica Introdutória: Identificação de minerais no microscópio petrográfico.

- David Glotz

- # Quartzo:

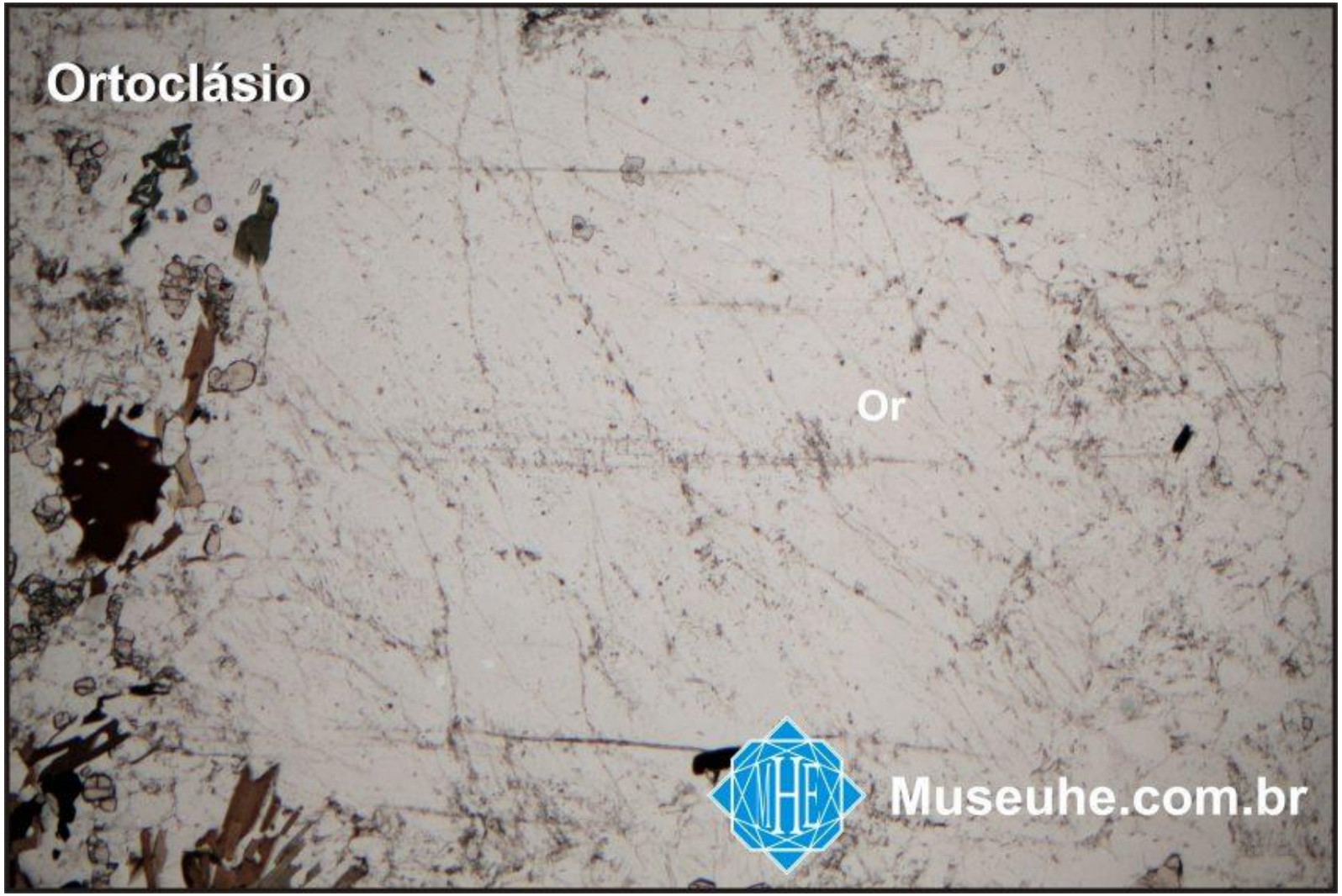


- **Figura 1: Quartzo a NC rodeado por cristais de Feldspato.**

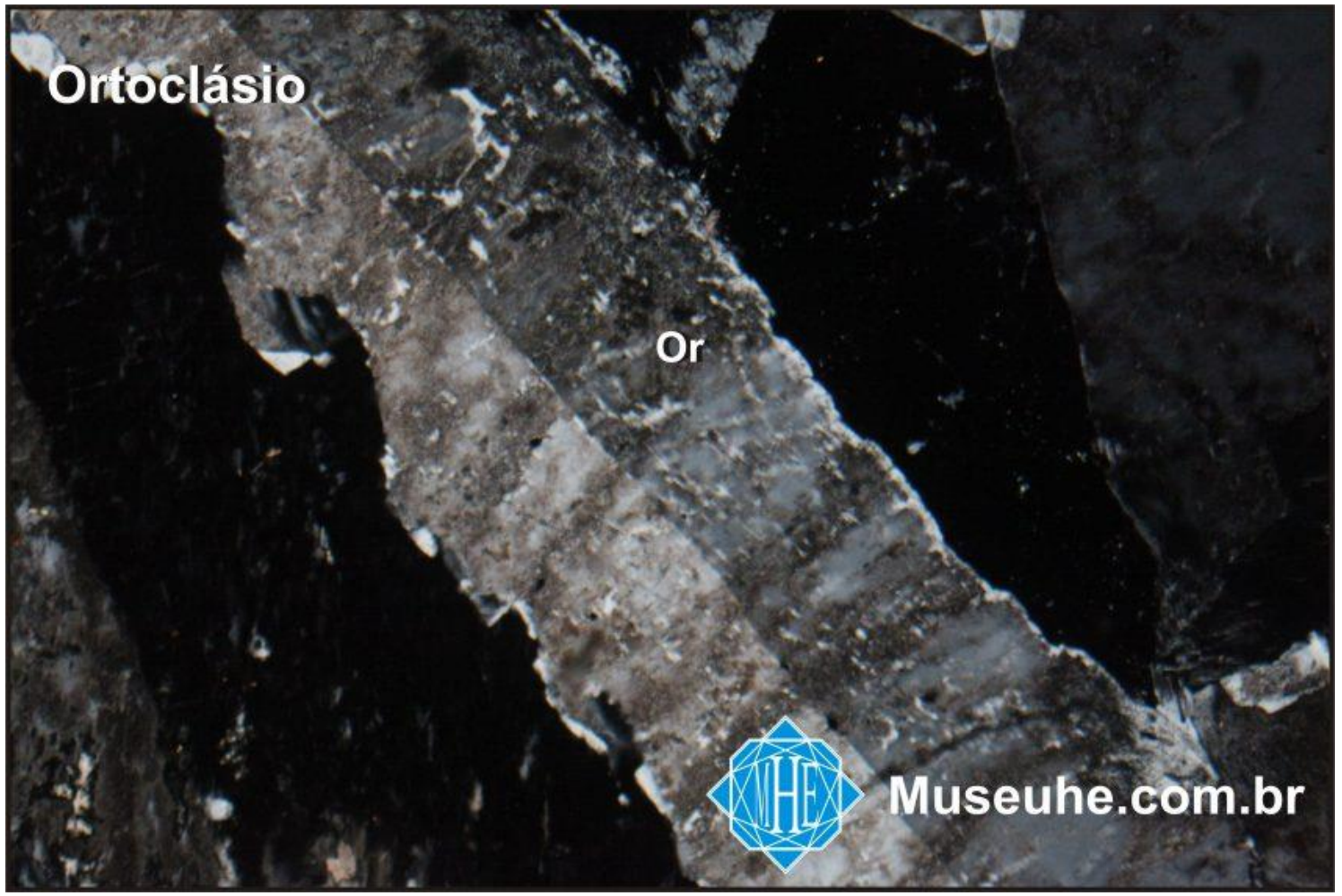


- **Figura 2: Quartzo a NX.**

- **Ortoclásio(K-Feldspato):**



- **Figura 3: Ortoclásio a NC.**



- **Figura 4: Ortoclásio a NX. Atente-se a geminação do tipo Carlsbad. Geralmente é característica para a identificação desse mineral.**

Figura 5: Ortoclásio a NX.
Geminação do tipo
Carlsbad está presente.

- **Microclínio(K-Feldspato):**

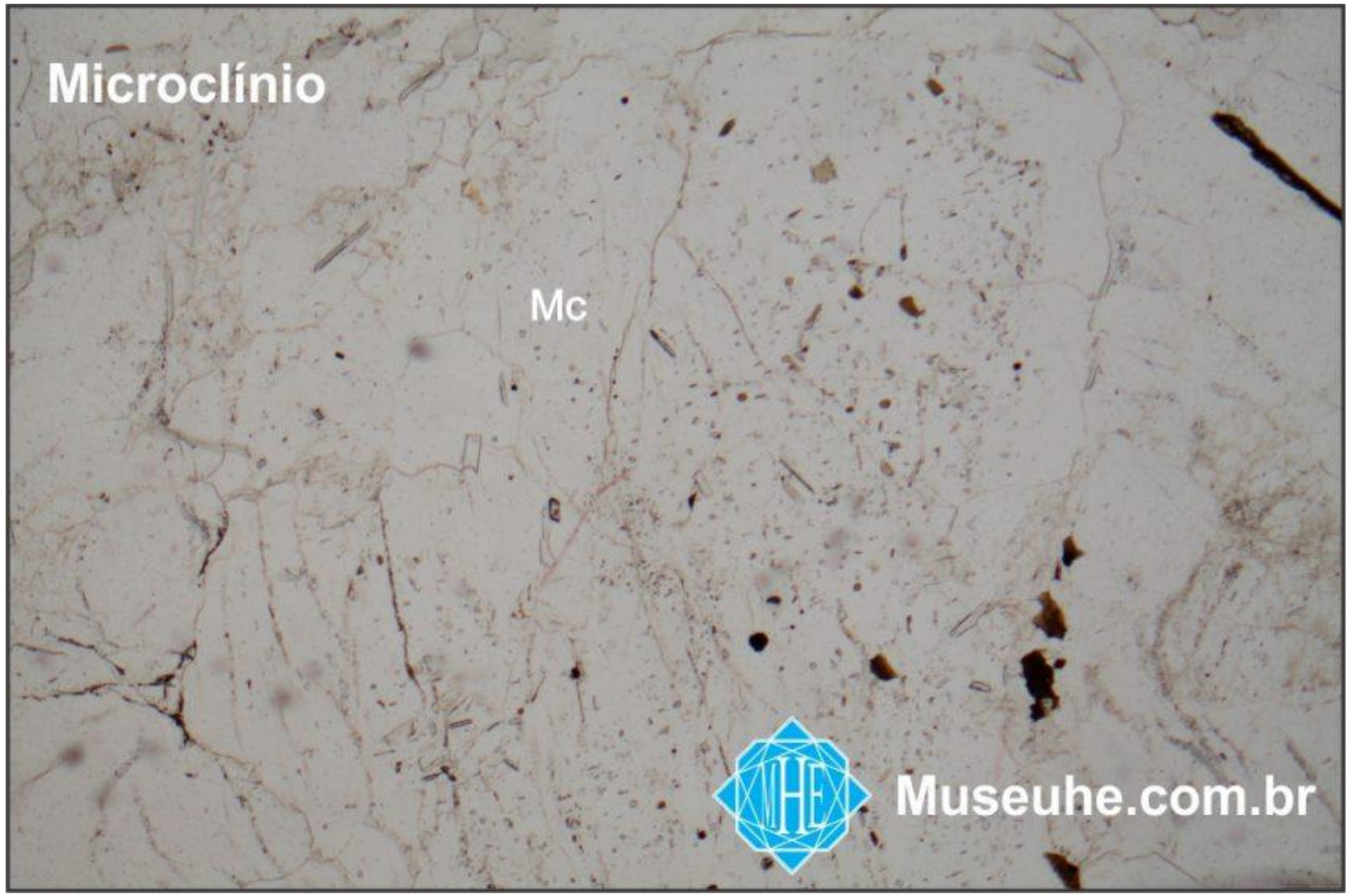


Figura 6: Microclínio a NC.

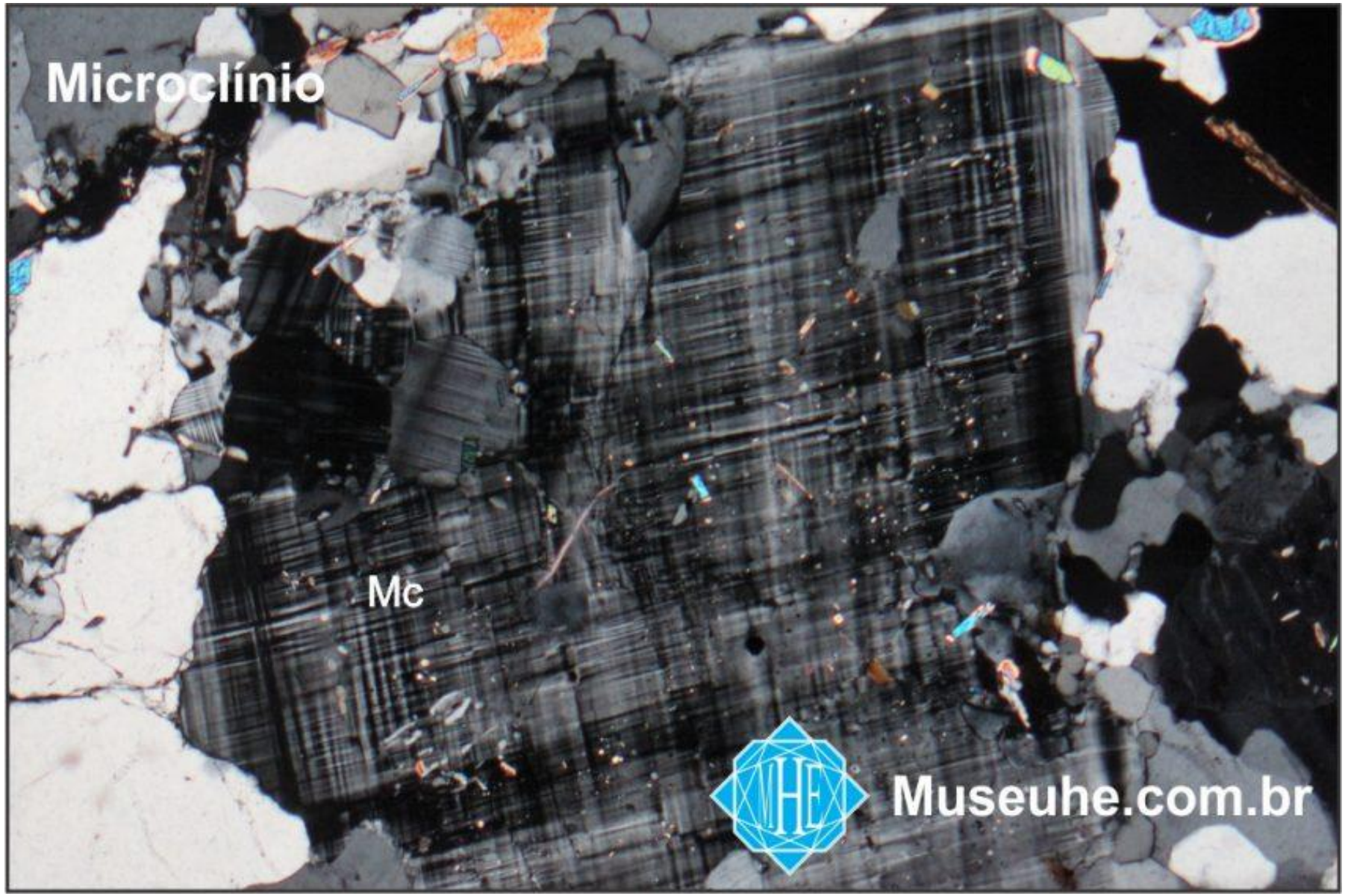


Figura 7: Microclínio a NX.
Atente-se a Geminação Tartan (Xadrez)

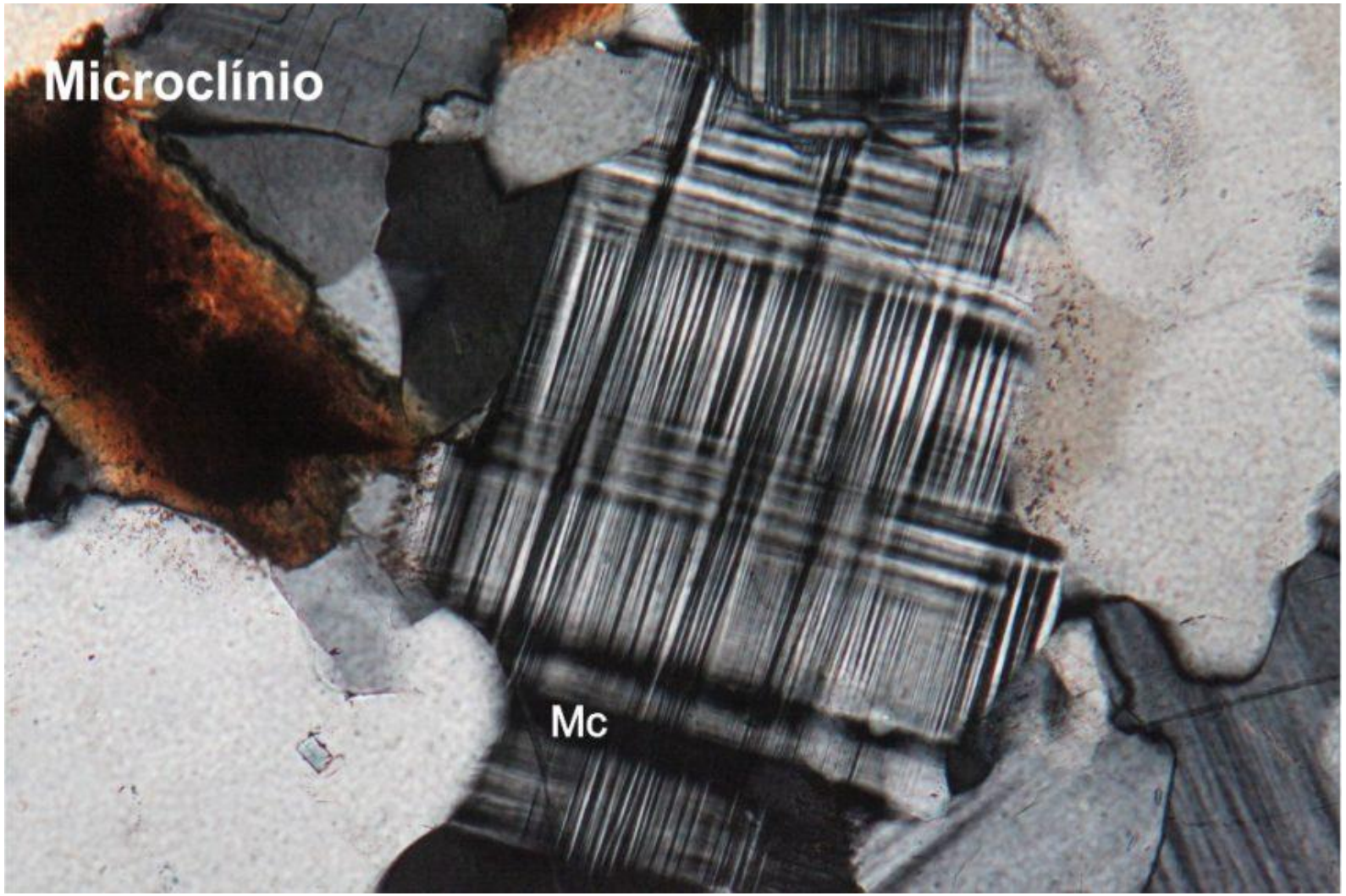


Figura 8: Microclínio a NX.
Atente-se a Geminação Tartan (Xadrez).

Observação: Não confundir com a geminação polissintética do Plagioclásio.

- **Plagioclásio:**

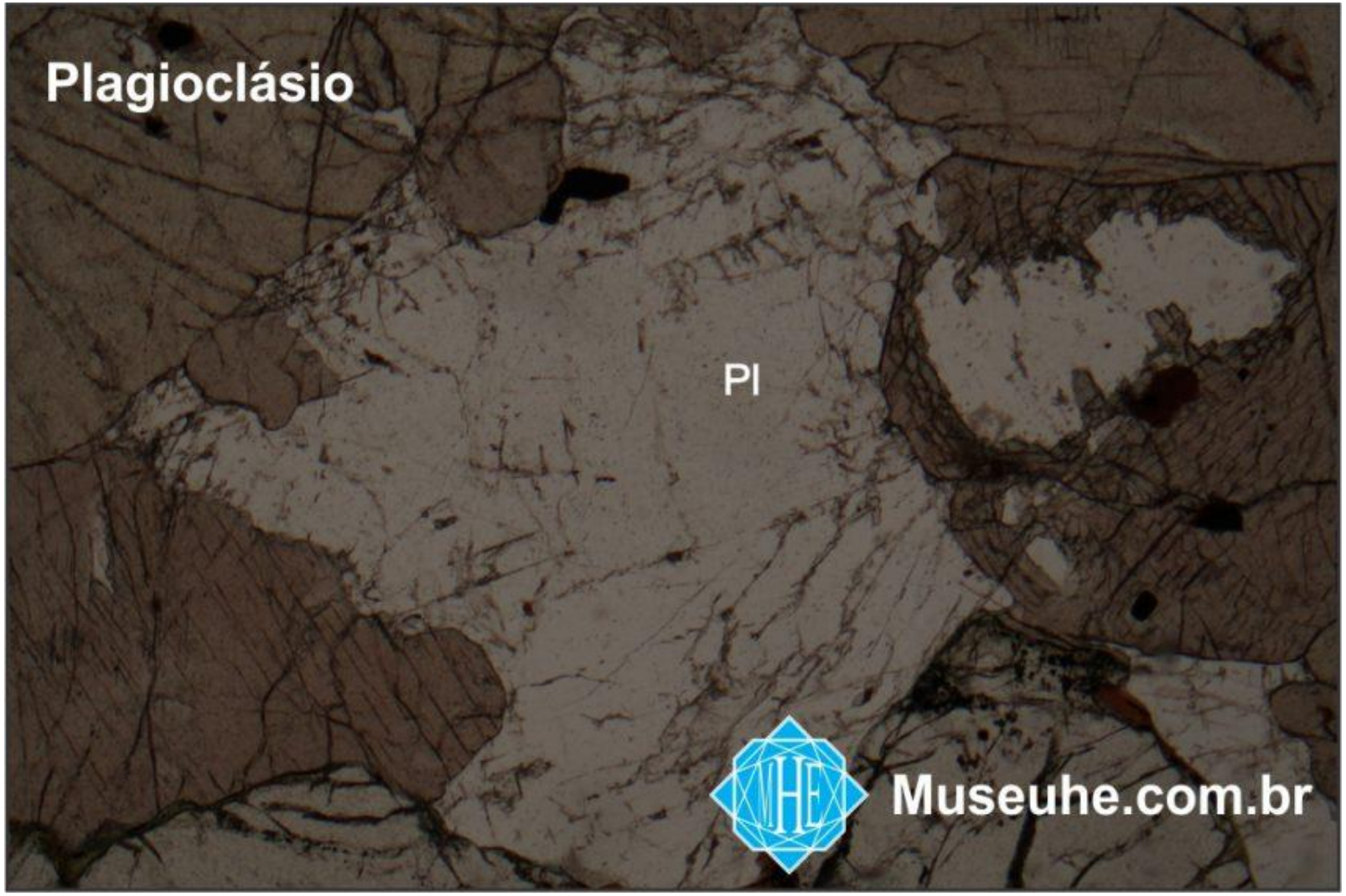


Figura 9: Plagioclásio a NC.

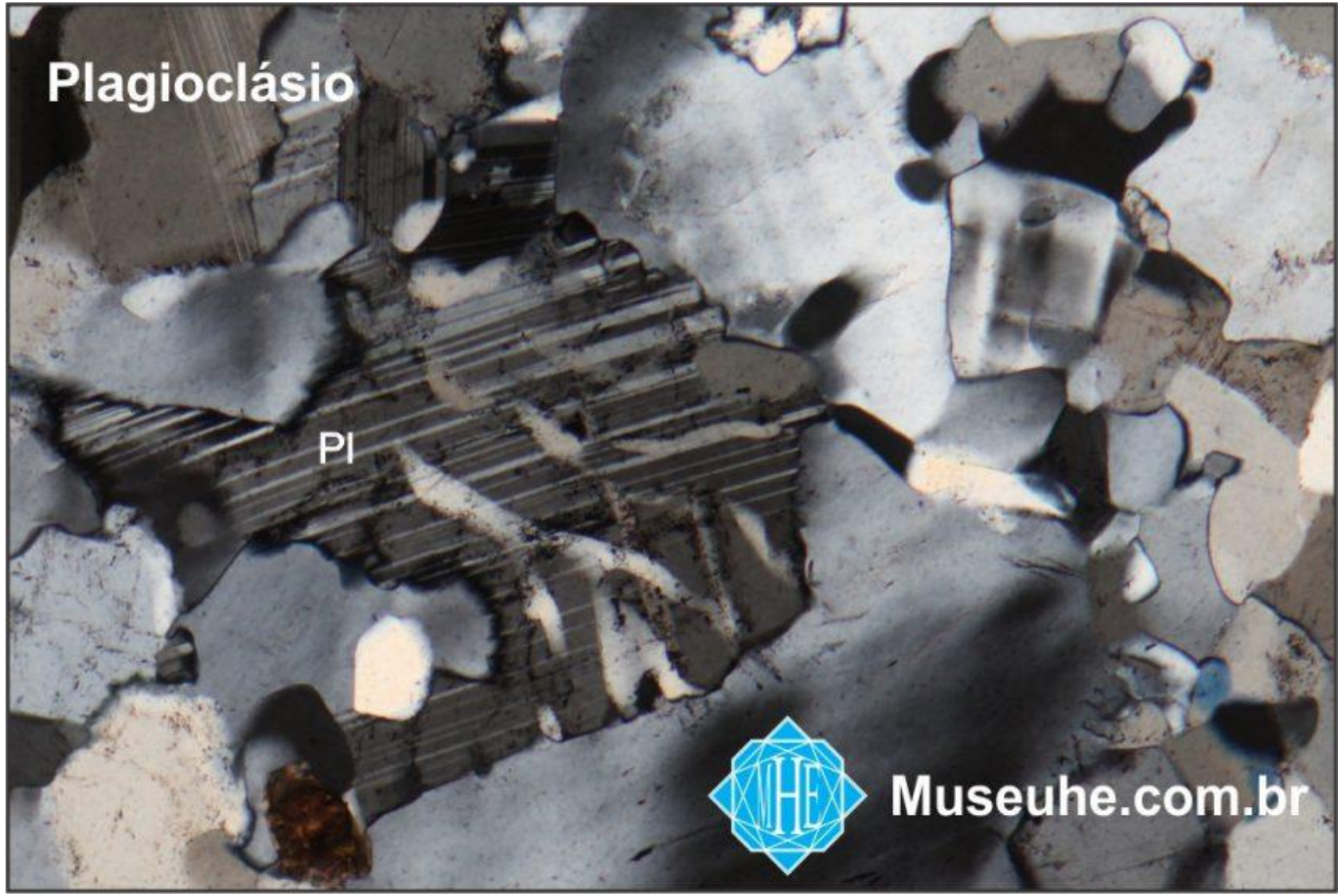


Figura 10: Cristal de Plagioclásio (Pl) com geminação do tipo polissintética onde é possível ver alternância de faixas claras e escuras.

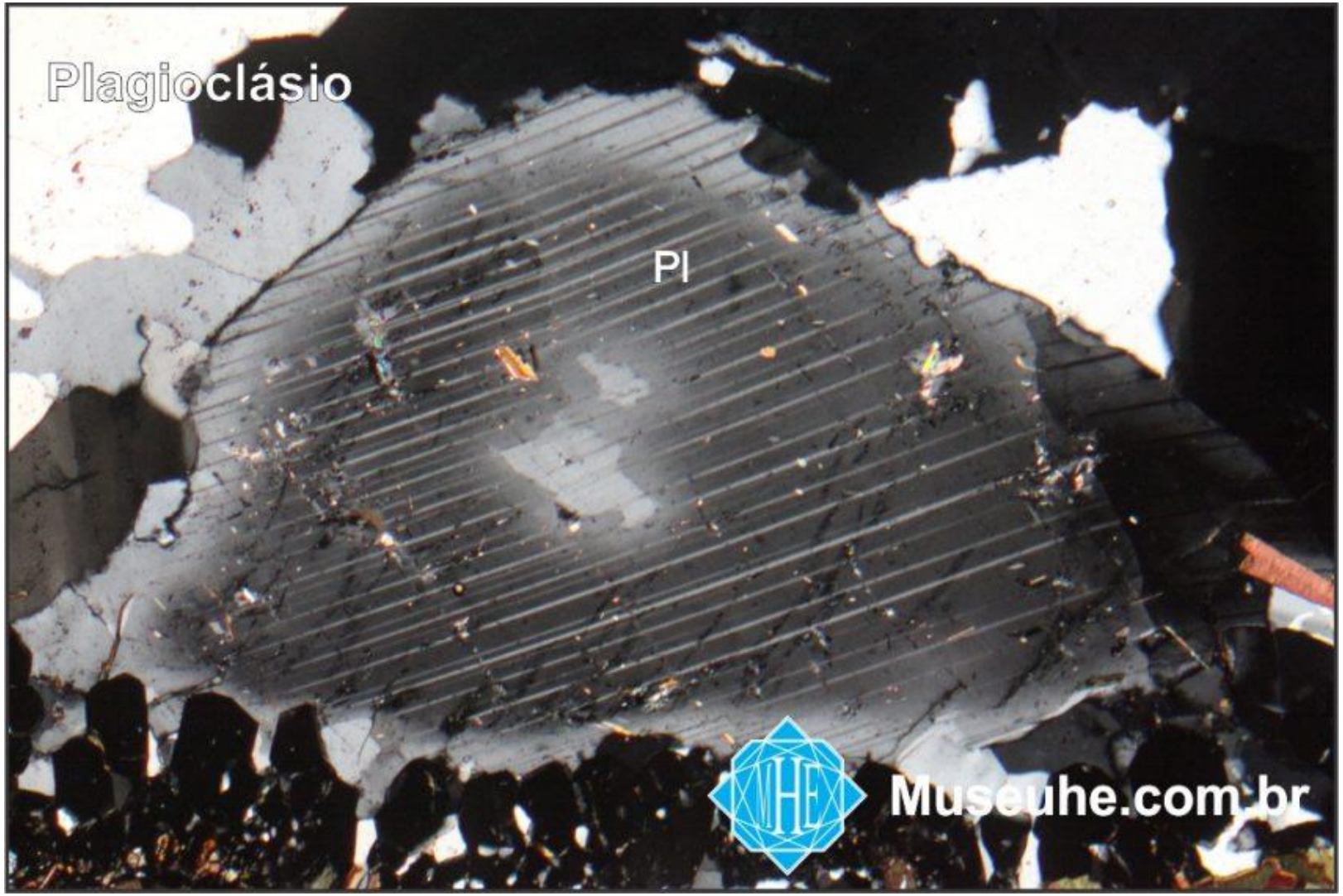


Figura 11: Cristal de Plagioclásio (Pl) com geminação do tipo polissintética

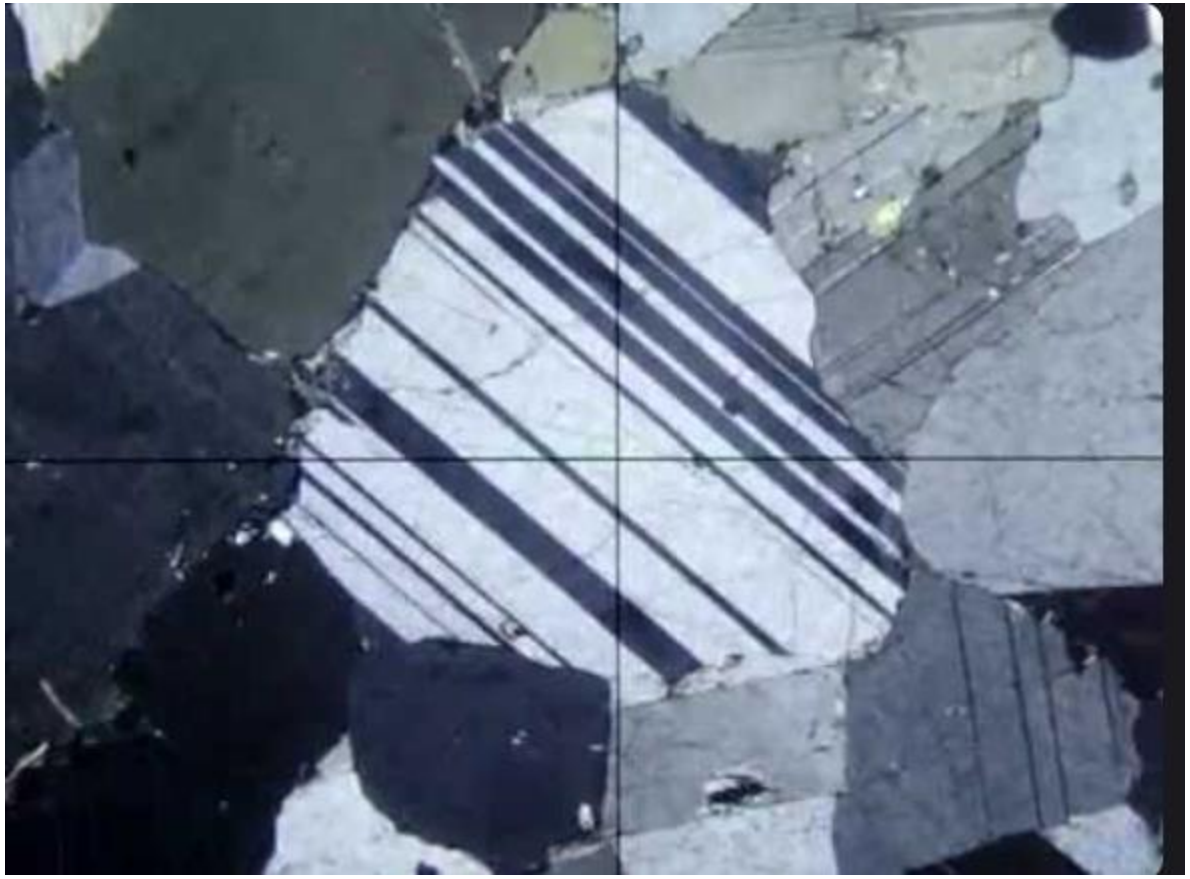


Figura 11: Cristal de Plagioclásio com geminação polissintética.

- **Biotita:**

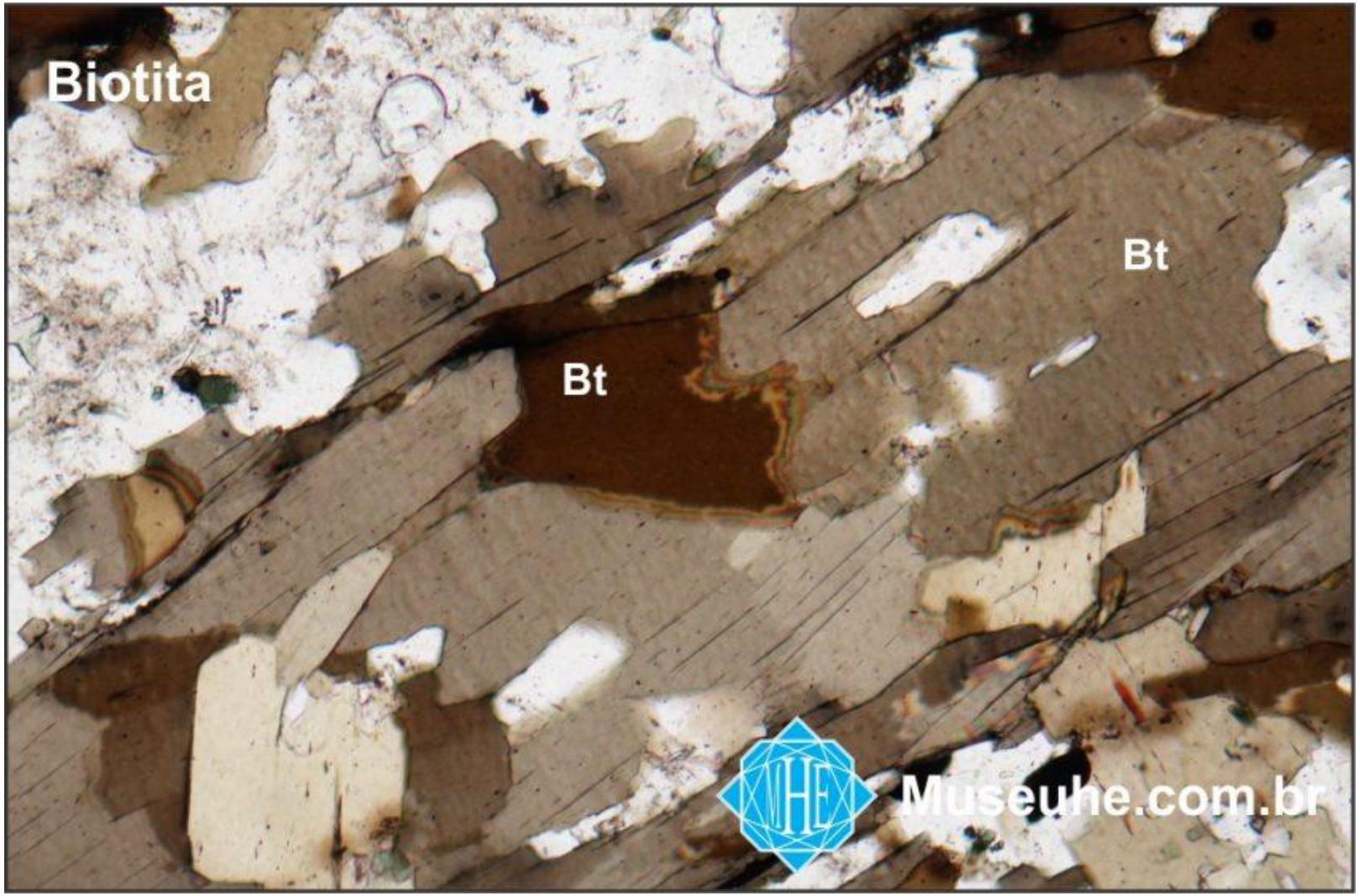


Figura 12: Cristais de Biotita (Bt) a NC.

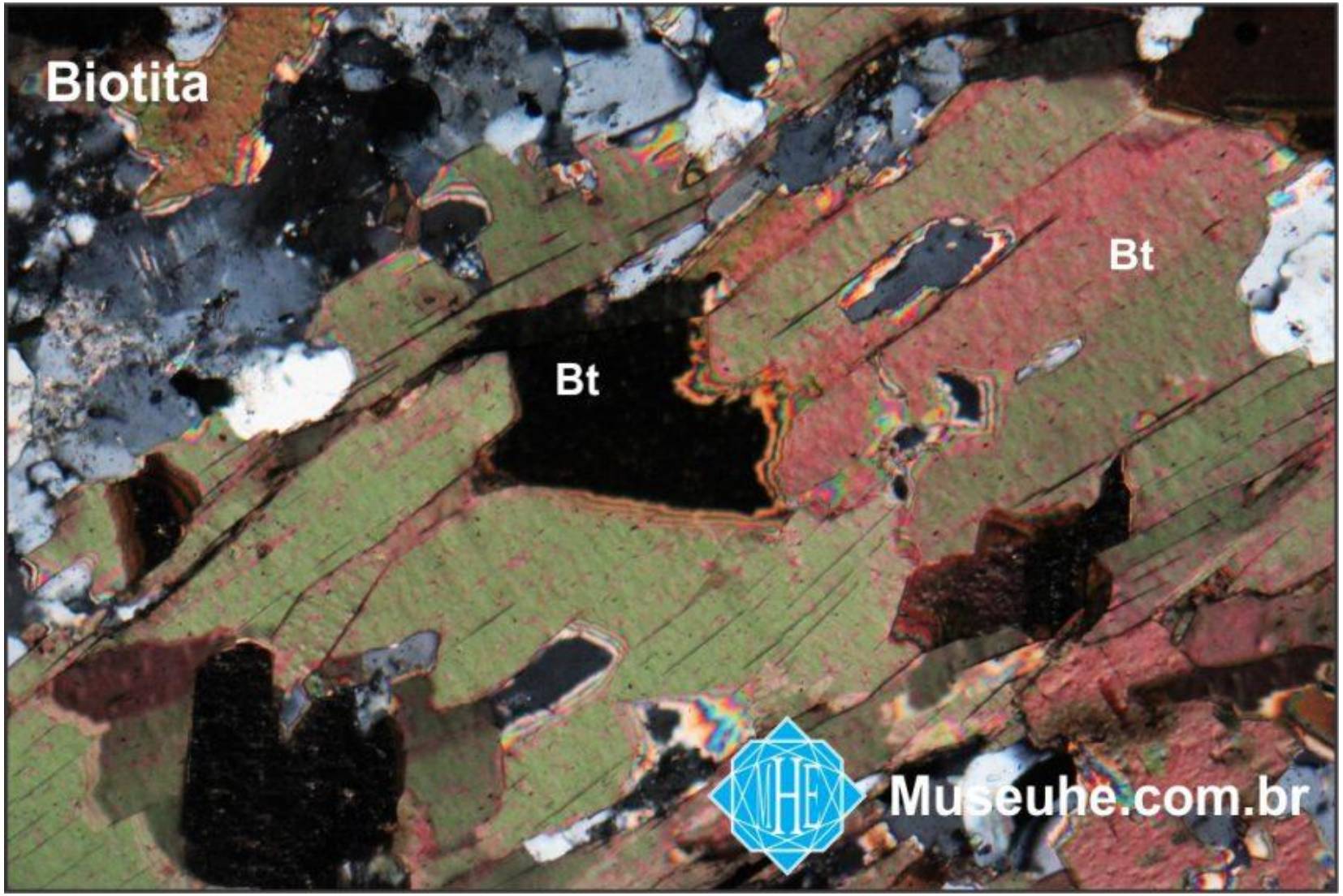


Figura 13: Cristais de Biotita (Bt) a NX.

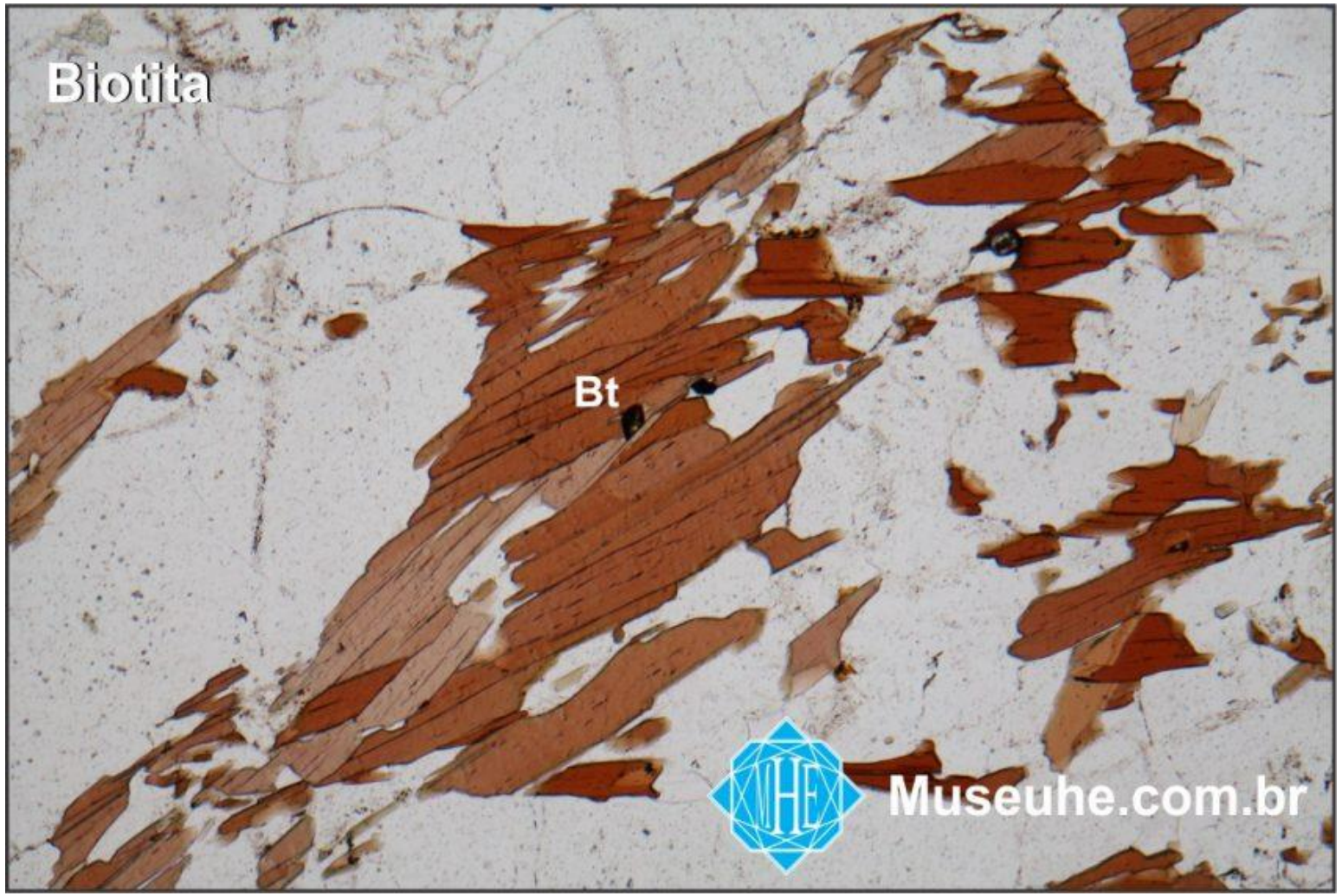


Figura 14: Cristais de Biotita (Bt) a NC.

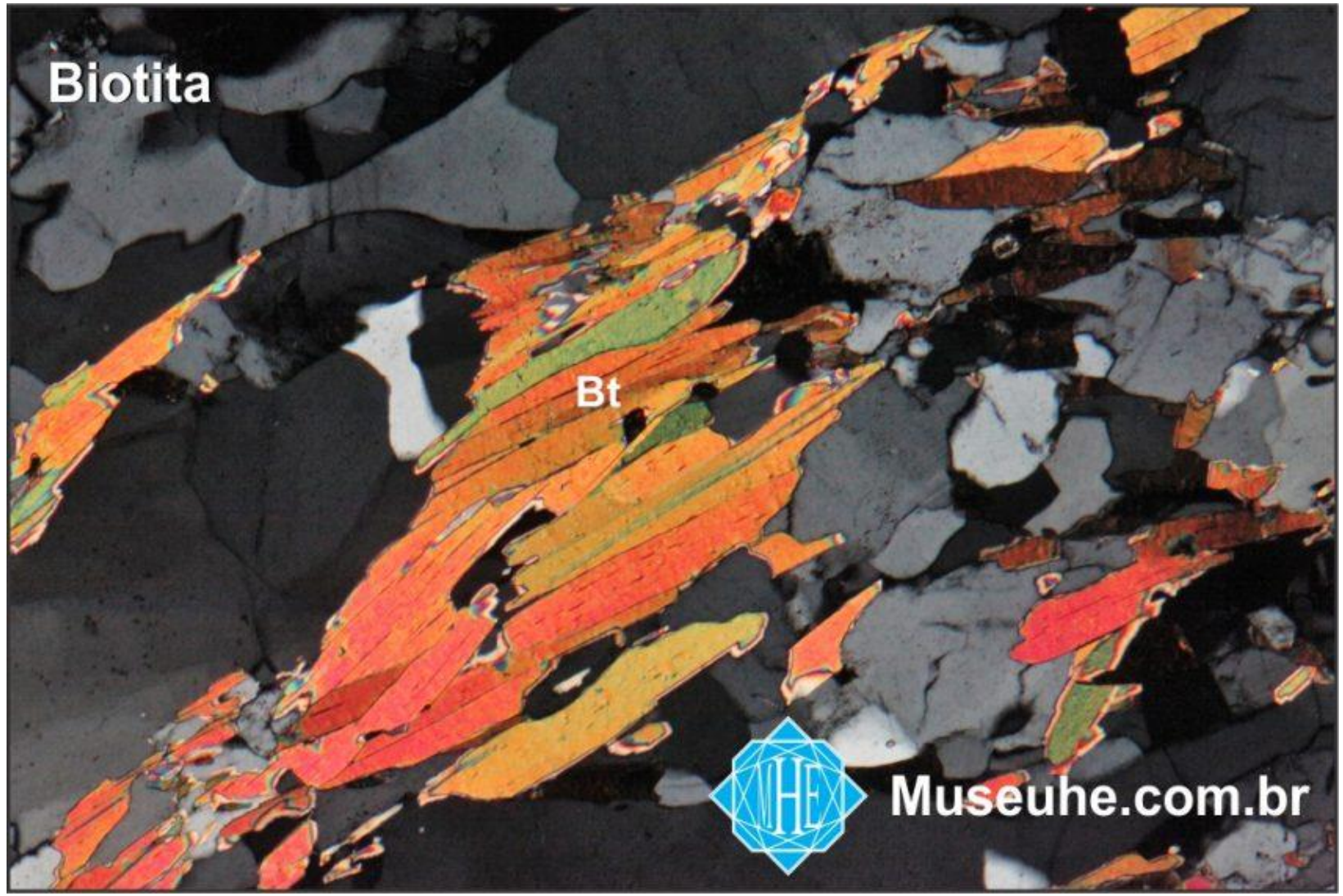


Figura 15: Cristais de Biotita (Bt) a NX.

- **Muscovita:**

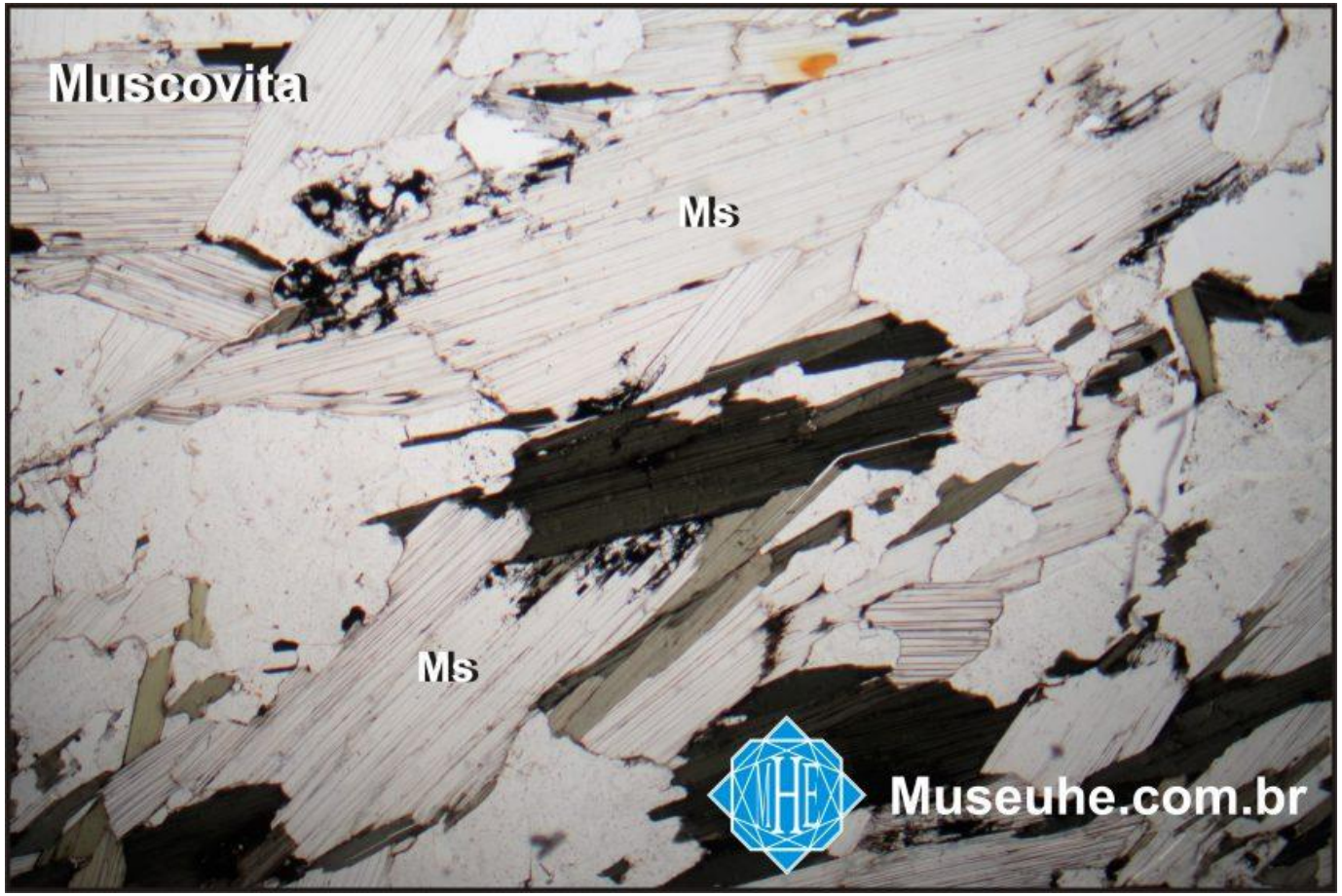


Figura 16: Cristais de Muscovita (Ms) a NC.

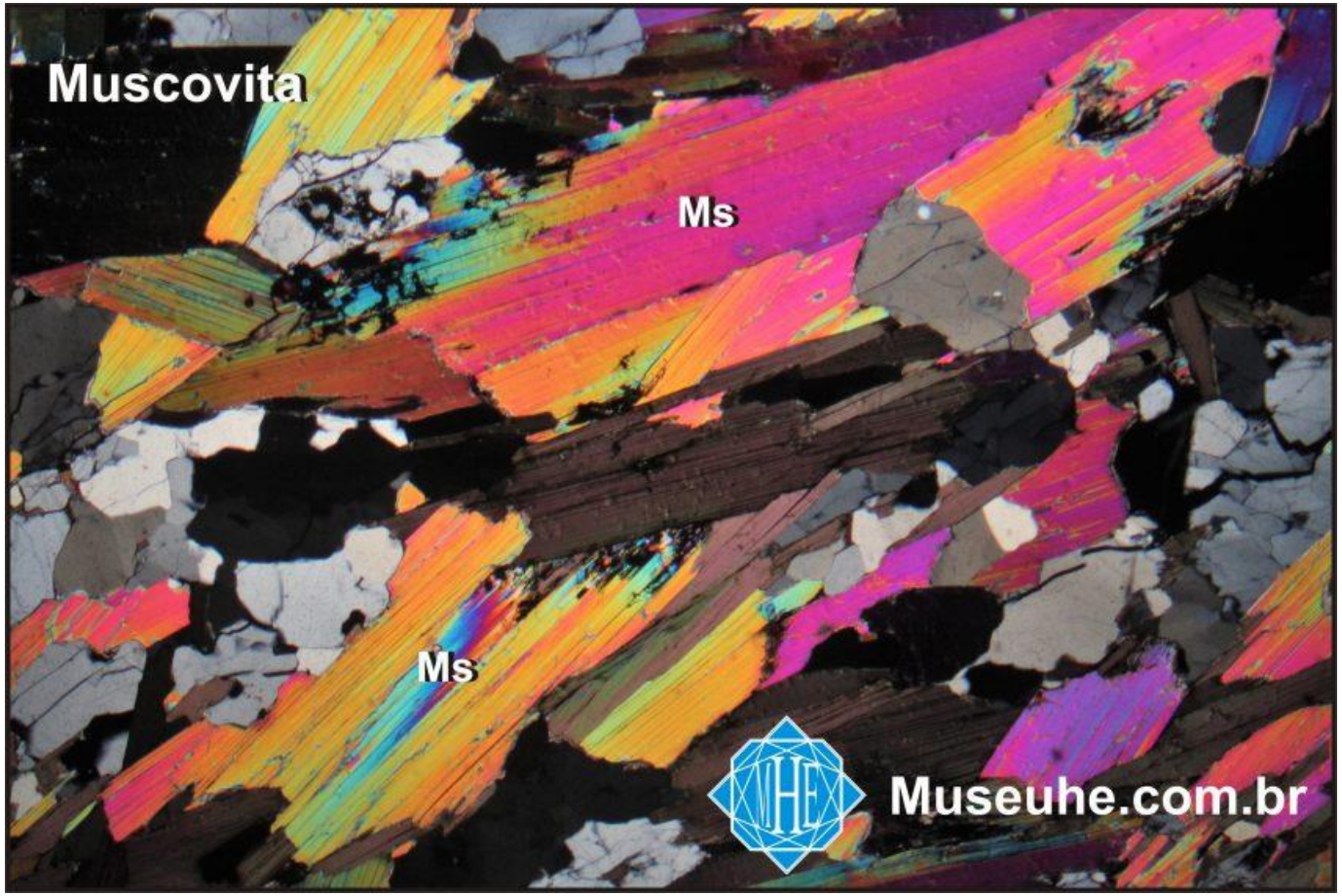


Figura 17: Cristais de Muscovita (Ms) a NX.

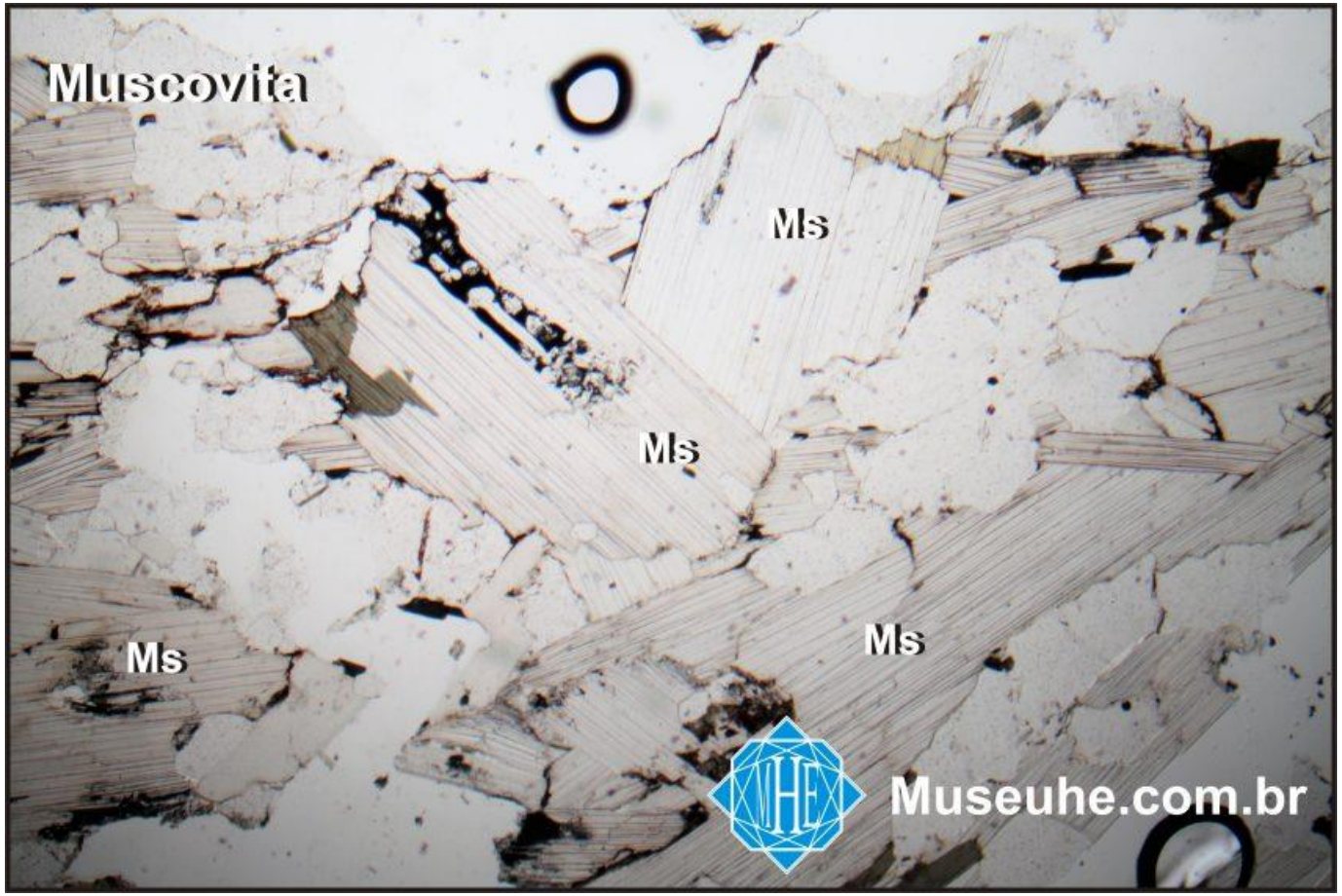


Figura 18: Cristais de Muscovita (Ms) a NC.

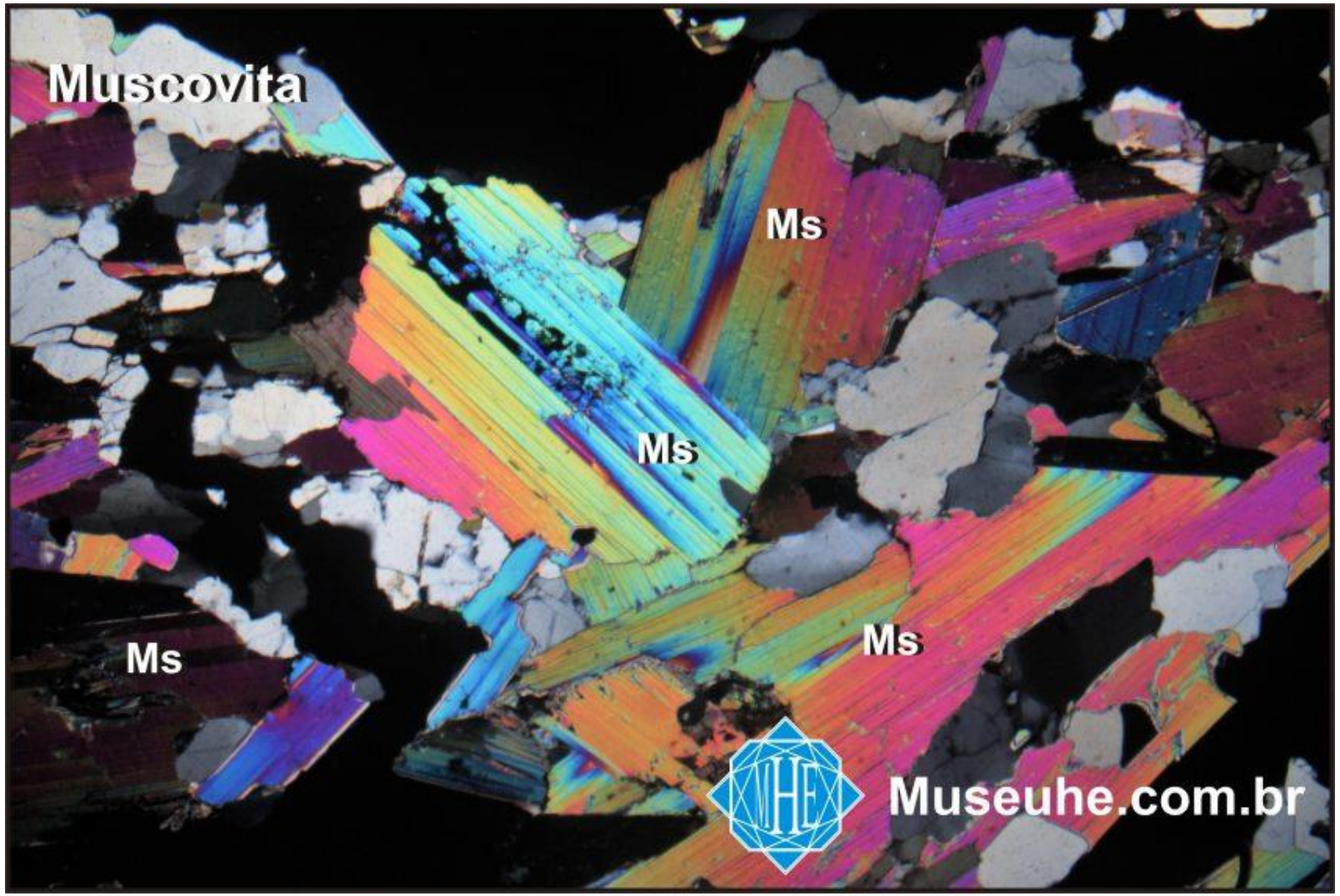


Figura 19: Cristais de Muscovita (Ms) a NX.

- **Clorita:**

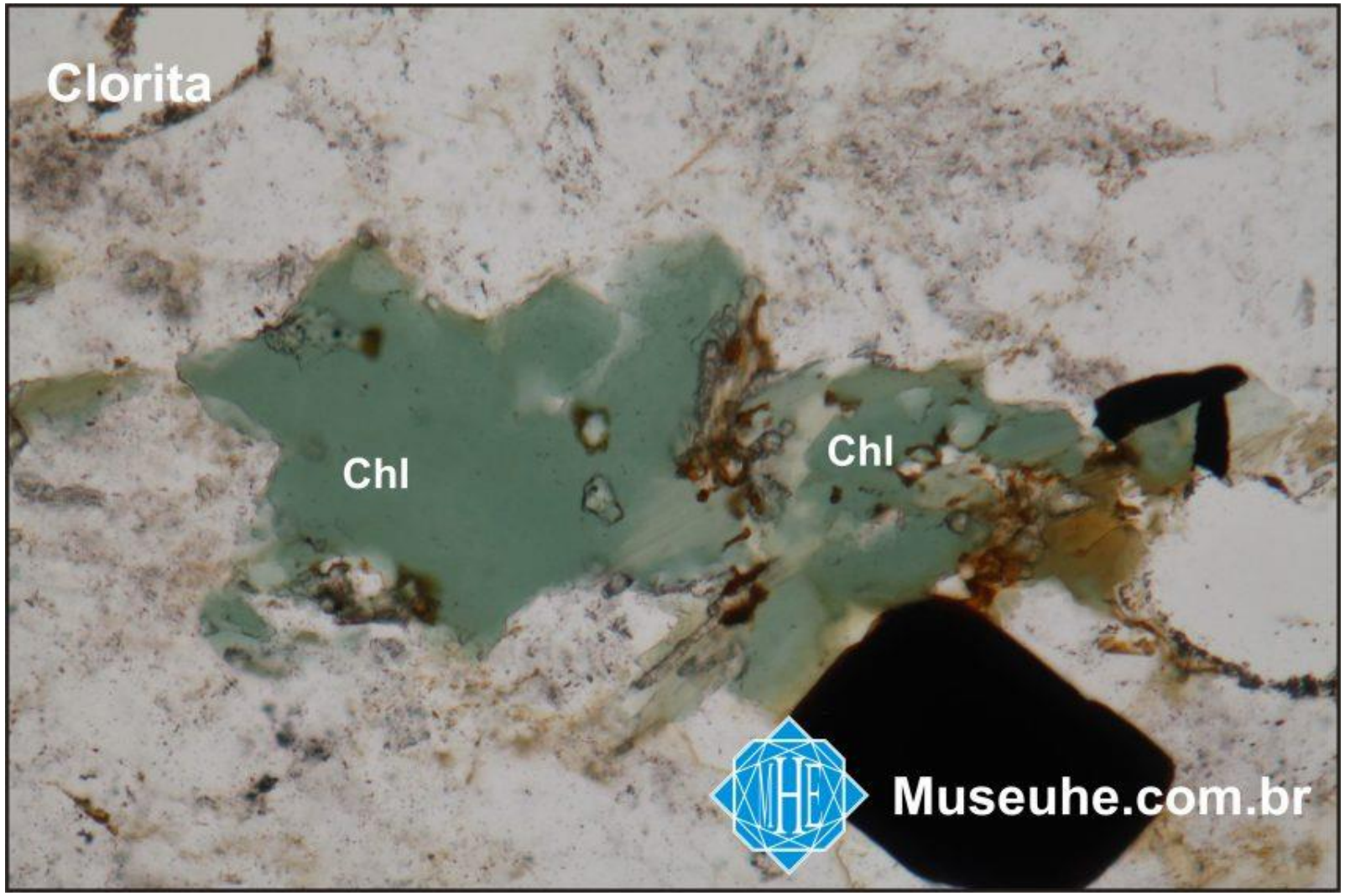


Figura 20: Clorita (Chl) a NC. Obs: Perceba o produto de alteração da biotita (marrom) para clorita (verde) processo esse conhecido como cloritização.

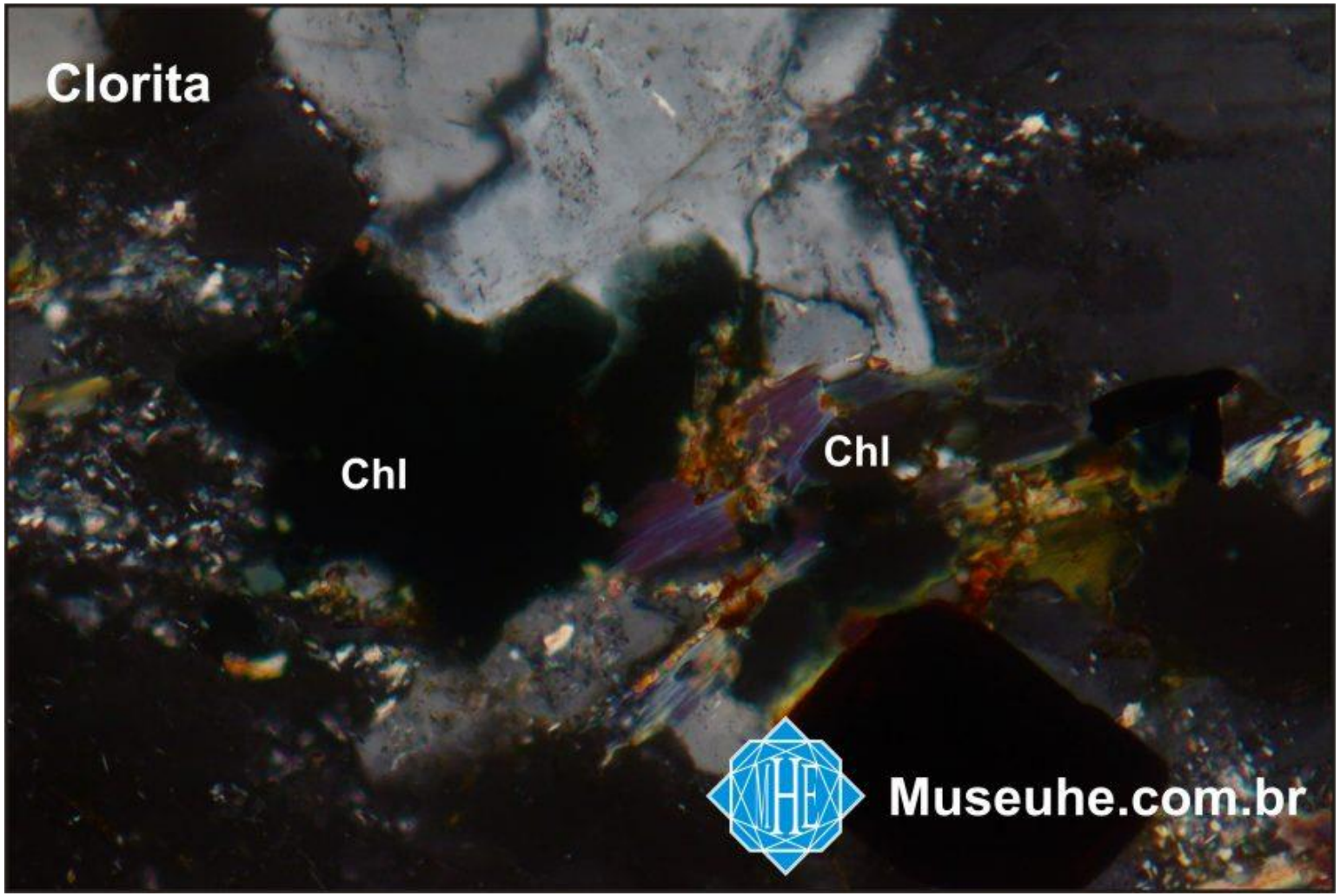


Figura 21: Clorita (Chl) a NX.

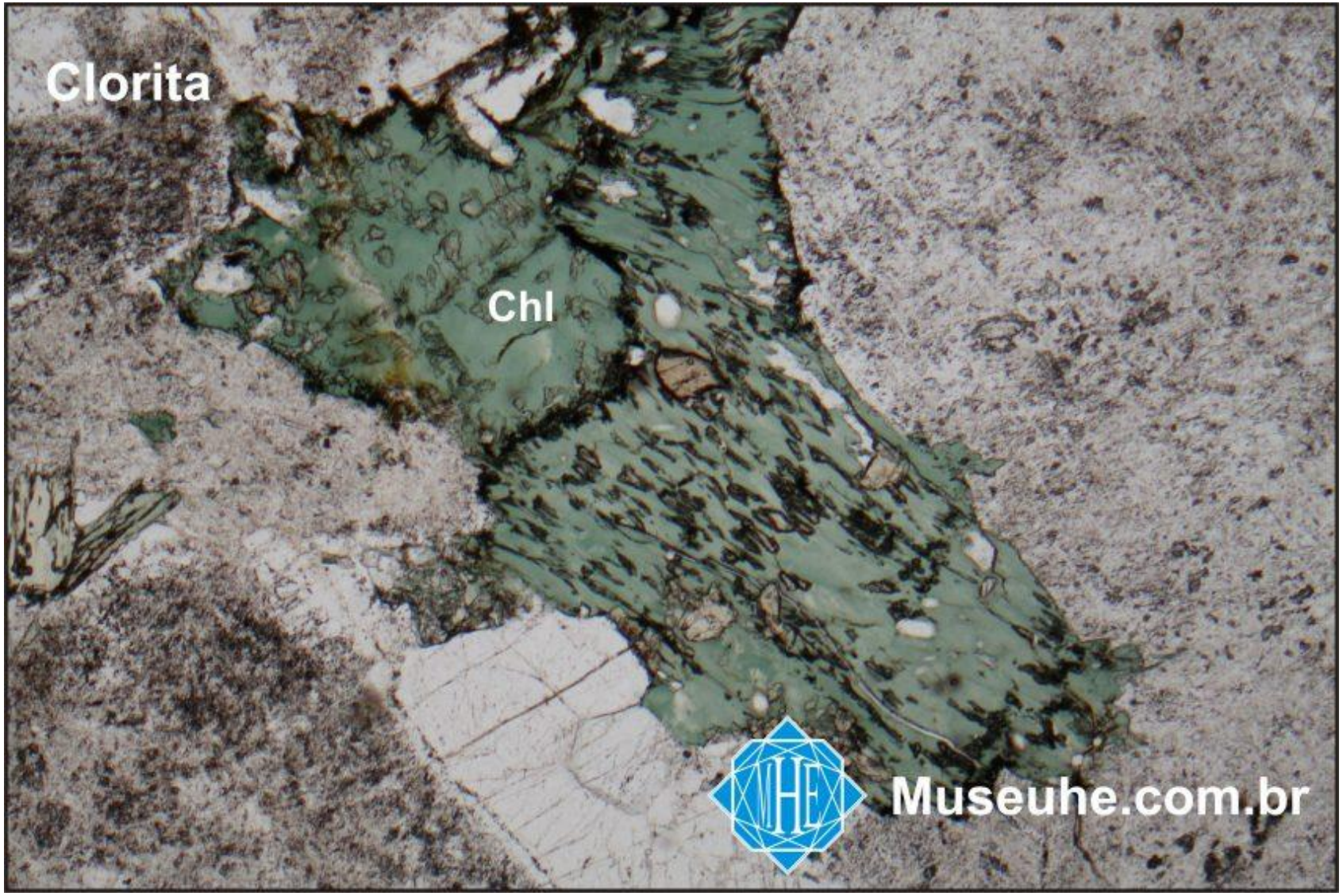


Figura 22: Clorita (Chl) a NC.

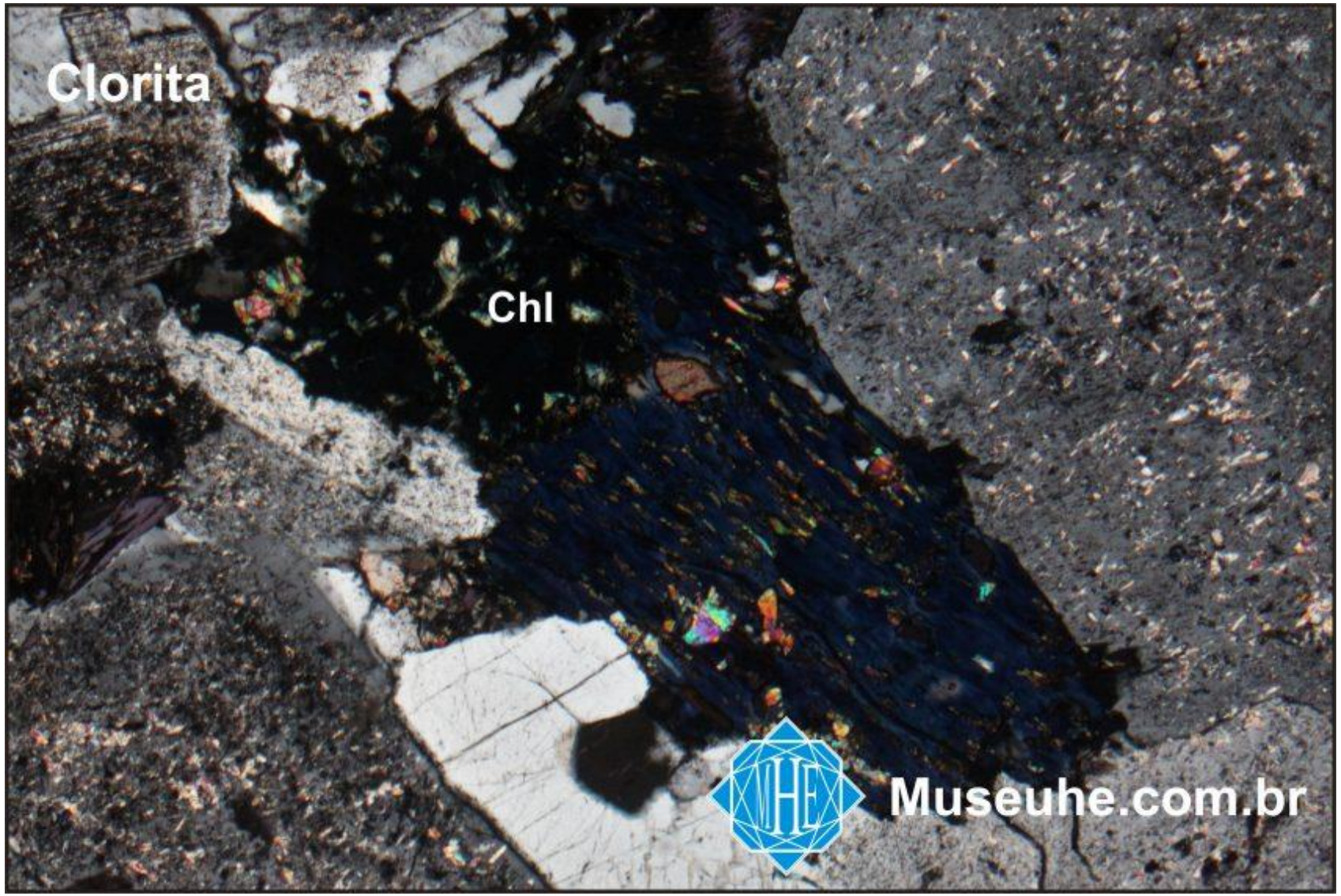


Figura 23: Clorita (Chl) a NX.

- **Titanita:**

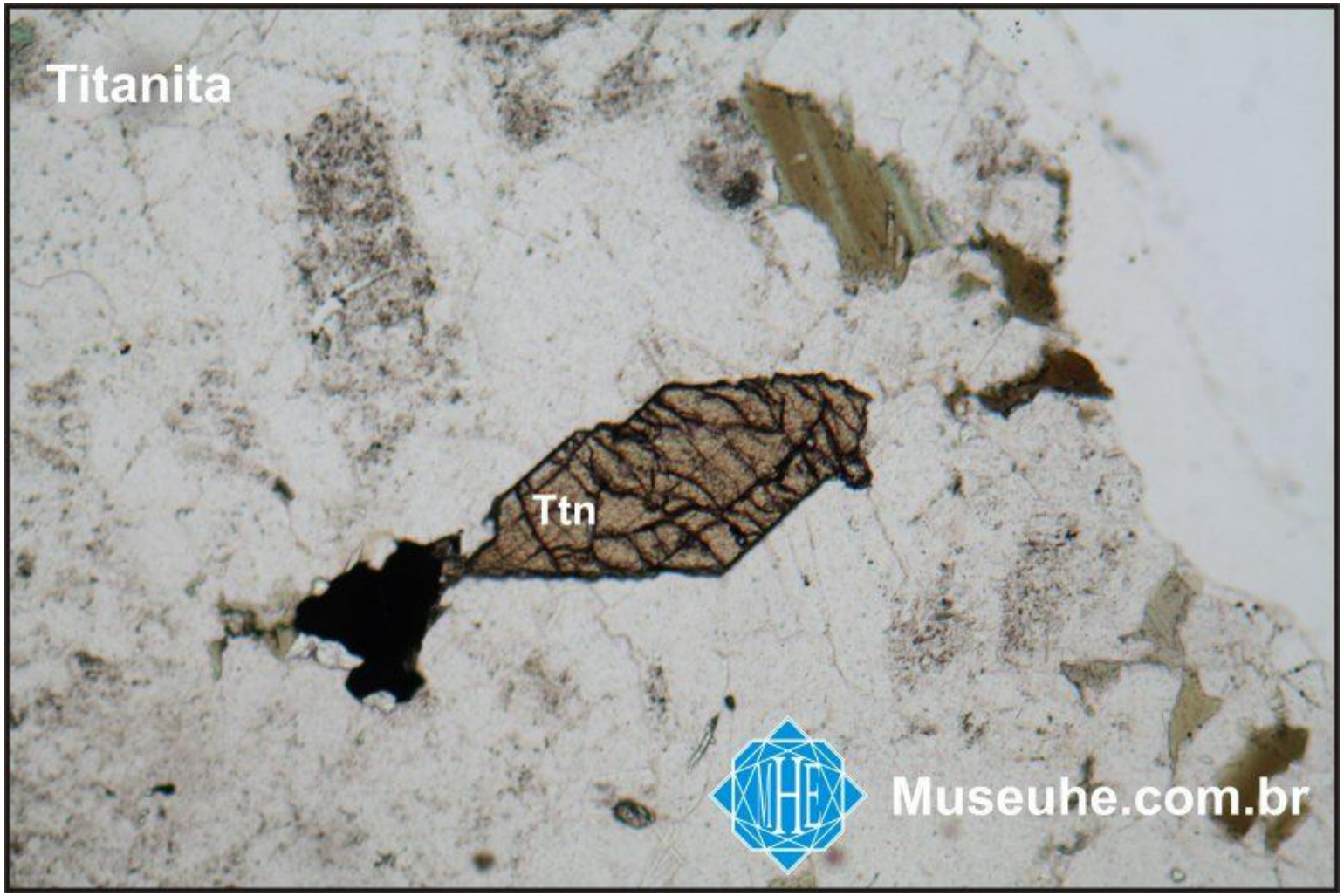


Figura 24: Titanita (Ttn) a NC.

Figura 25: Titanita (Ttn) a NC.

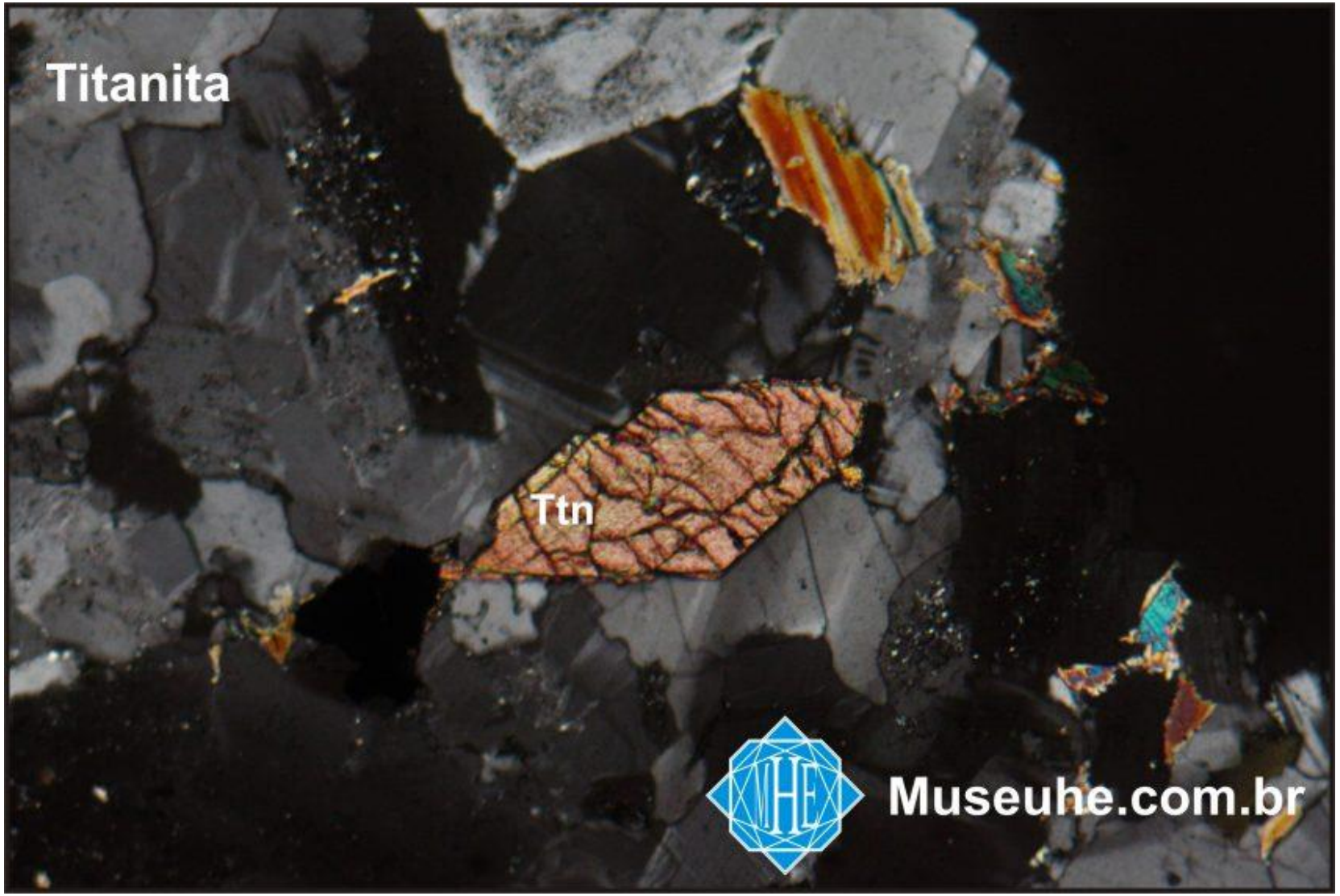


Figura 26: Titanita (Ttn) a NX.

Figura 27: Titanita (Ttn) a NX.

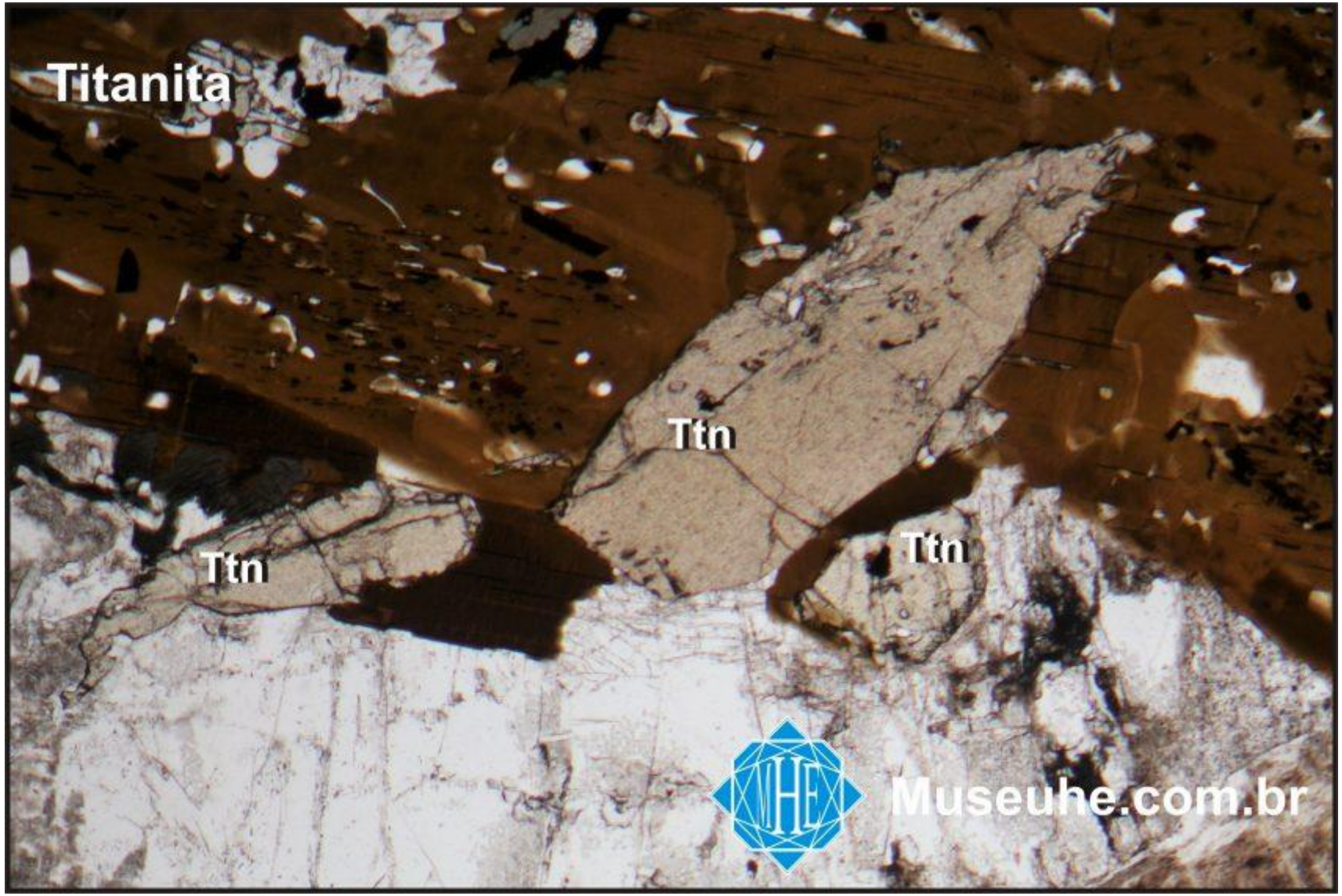


Figura 28: Cristais de Titanita (Ttn) a NC.

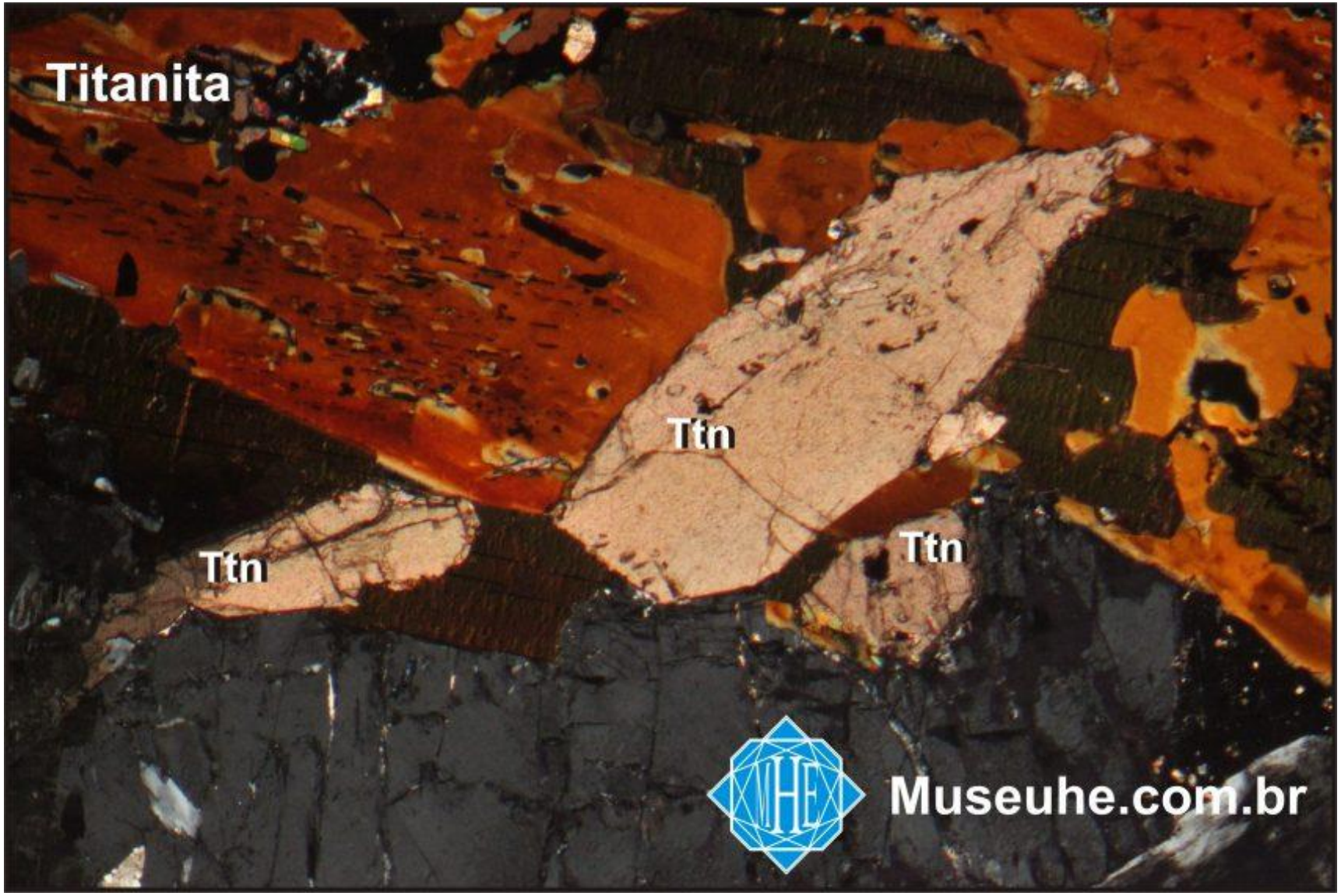


Figura 29: Cristais de Titanita (Ttn) a NX.

- **Zircão:**

Figura 30: Cristais de Zircão (Zrn) a NC.

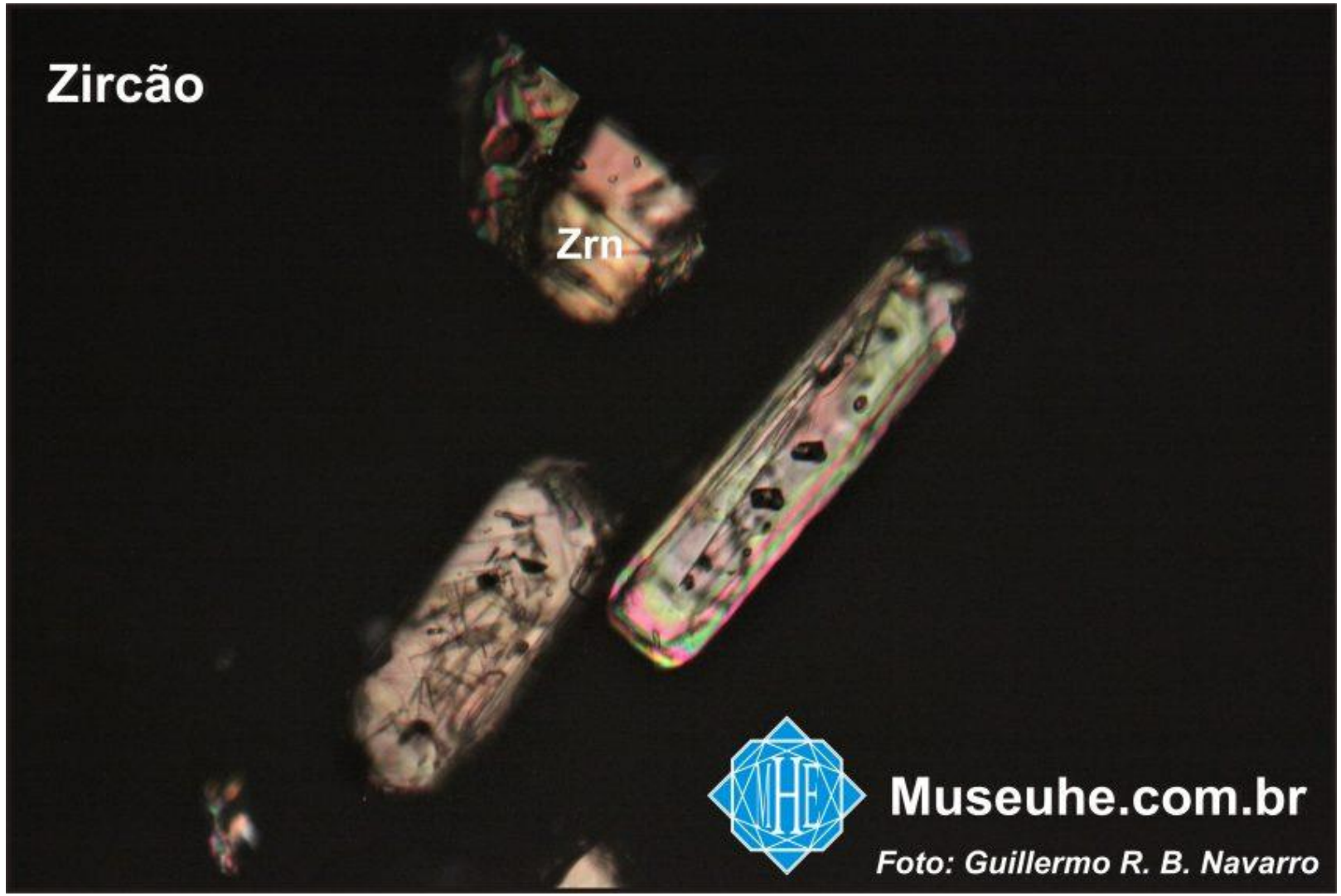


Figura 31: Cristais de Zircão (Zrn) a NX.

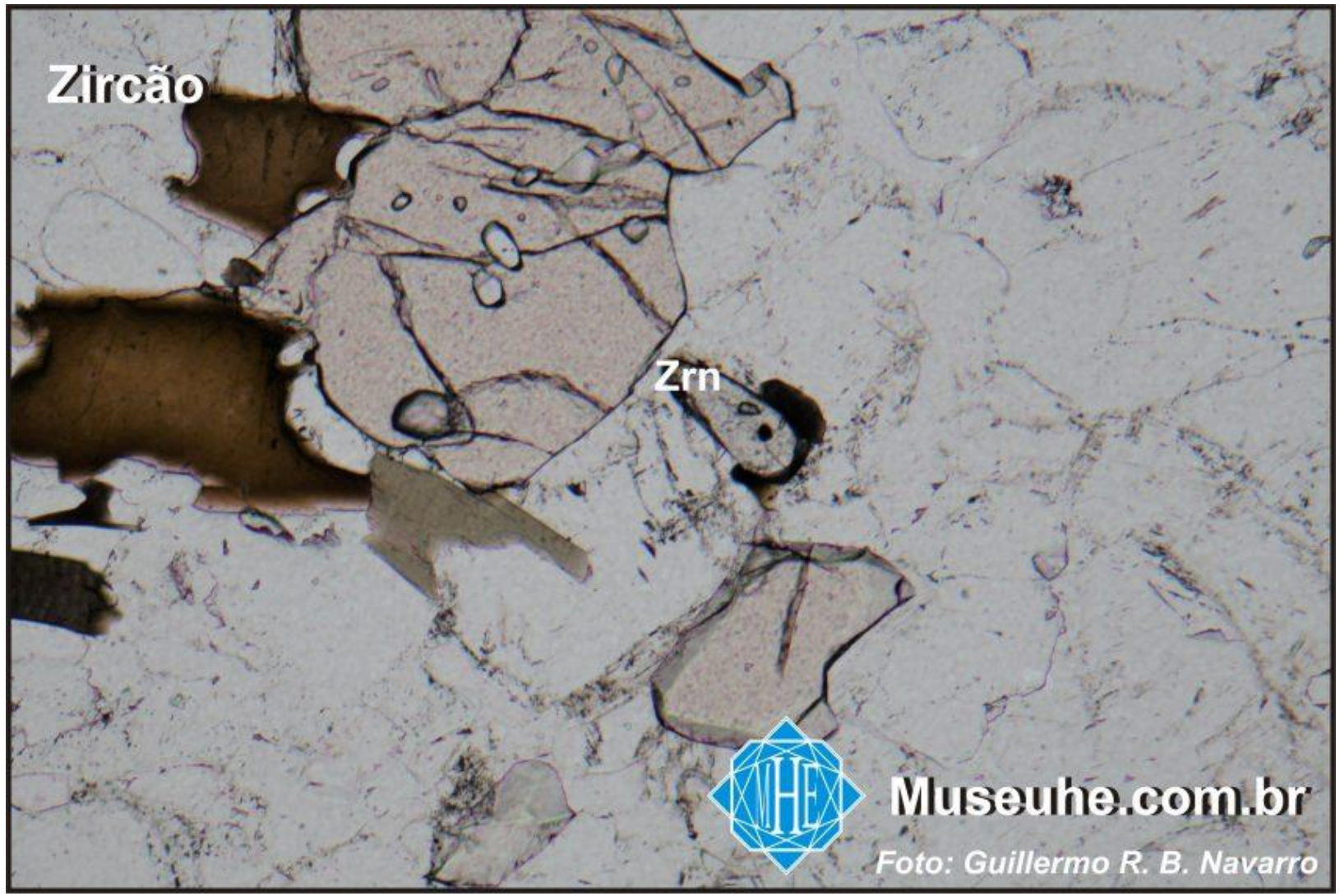


Figura 32: Cristal de Zircão (Zrn) a NC.

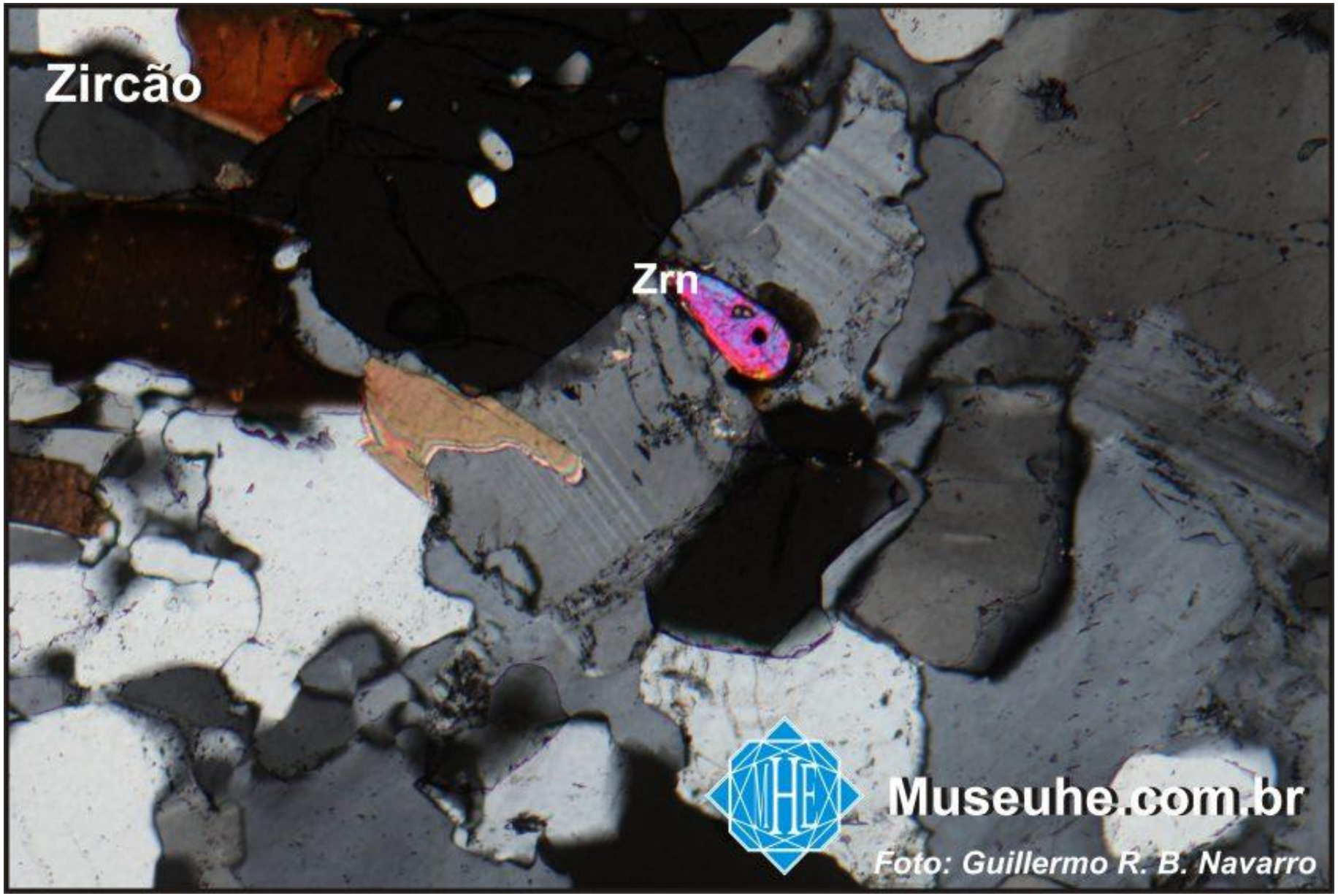


Figura 33: Cristal de Zircão (Zrn) a NX.

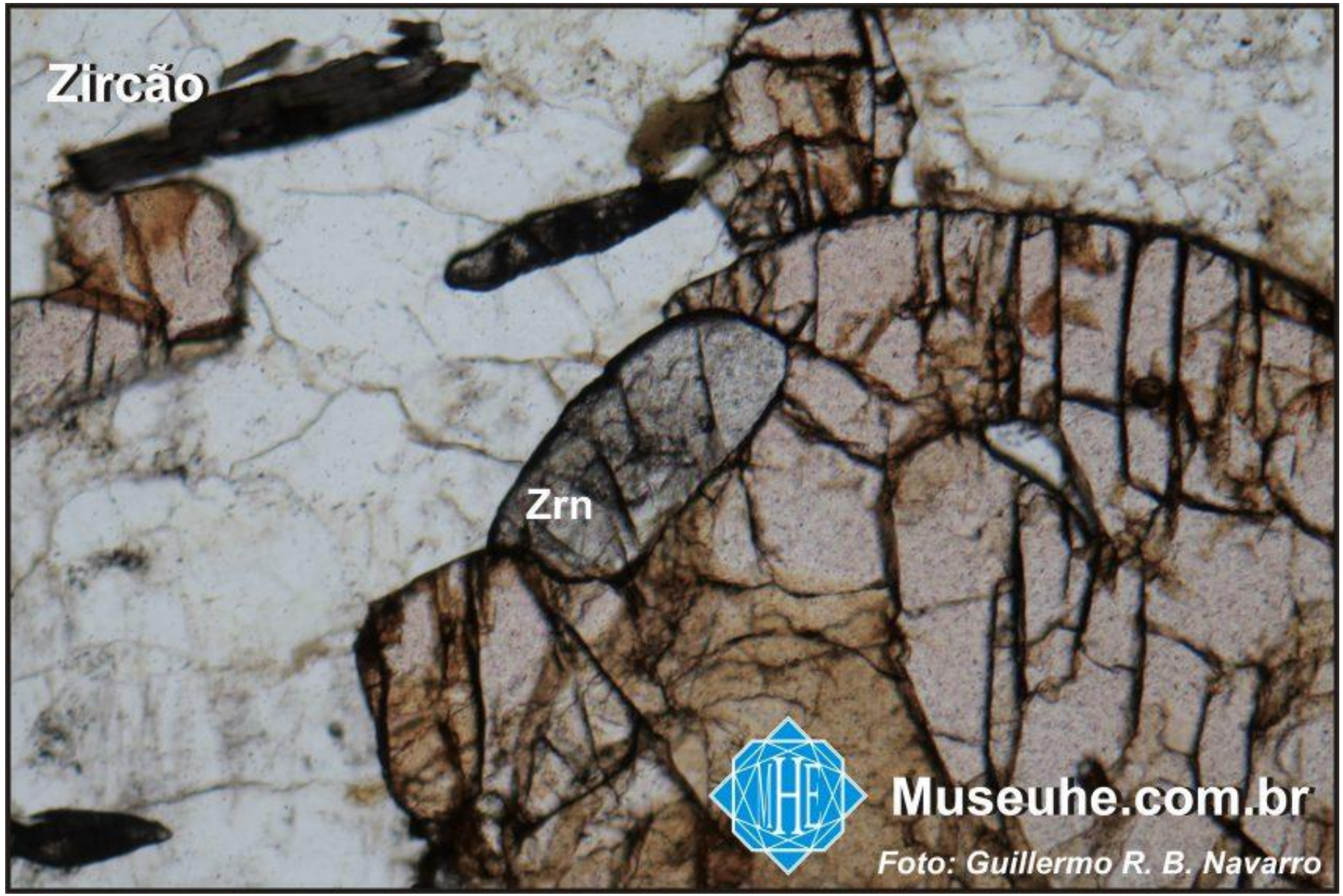


Figura 34: Cristal de Zircão (Zrn) a NC.

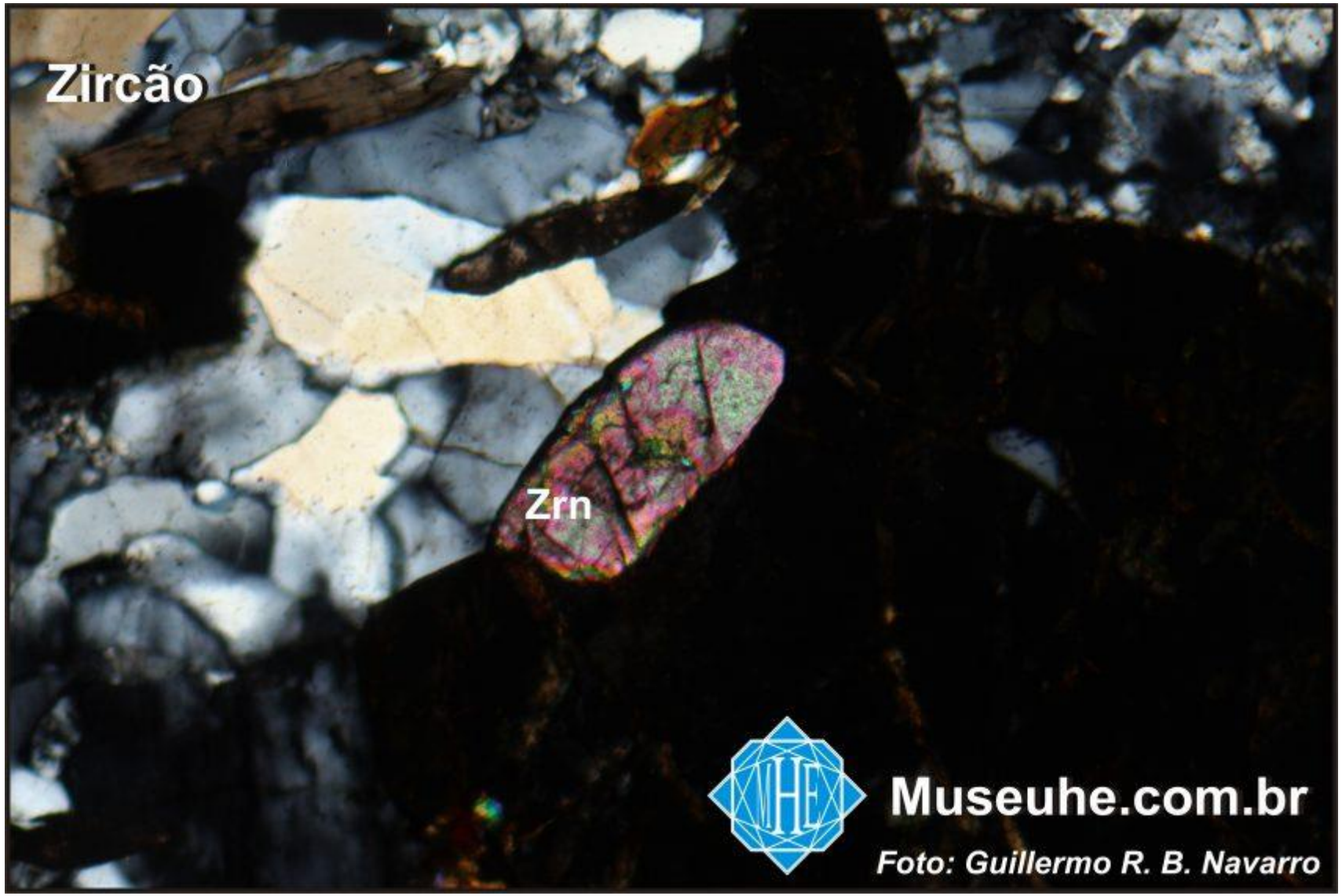


Figura 35: Cristal de Zircão (Zrn) a NX.

- **Turmalina:**

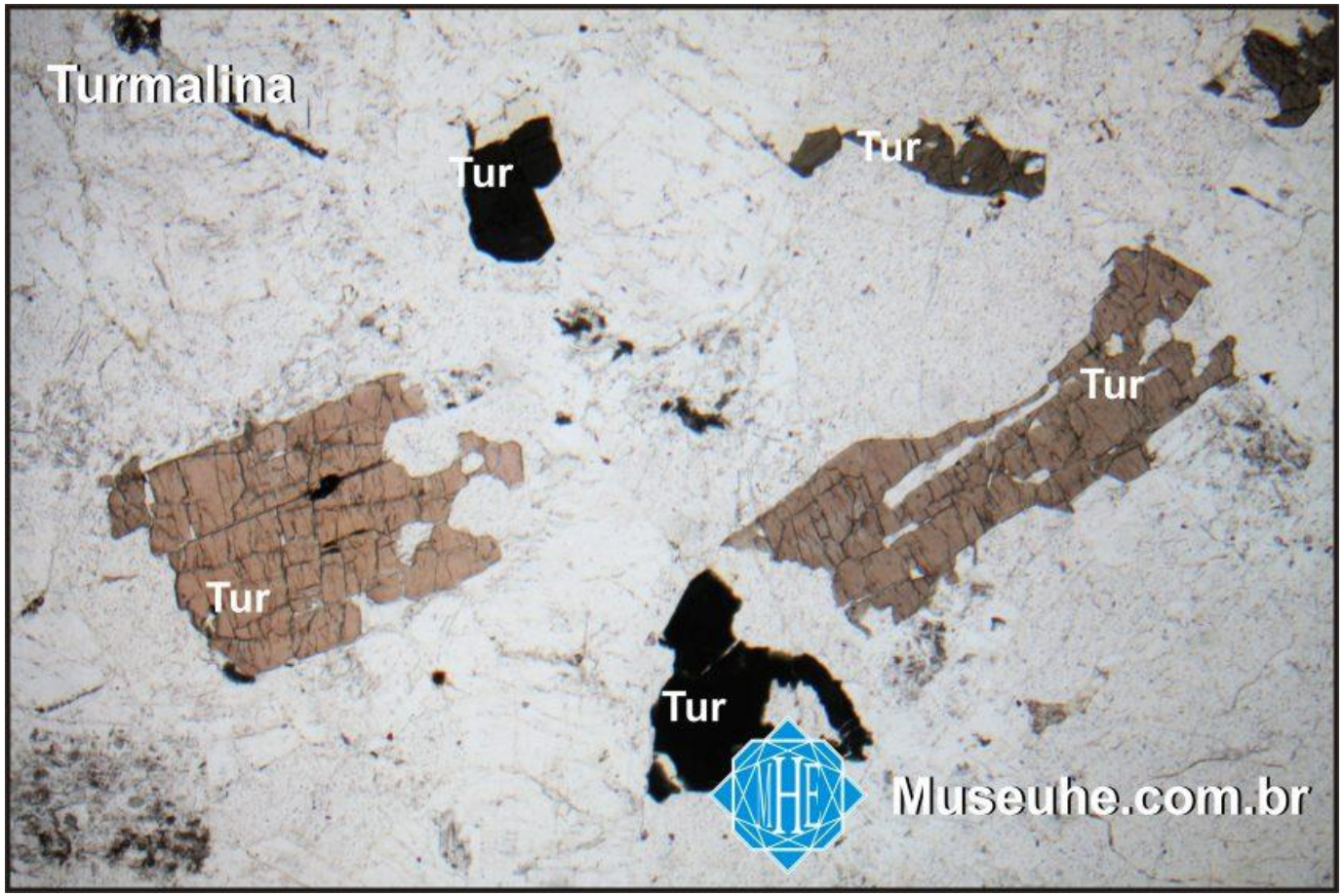


Figura 36: Cristais de Turmalina **(Tur) a NC.**

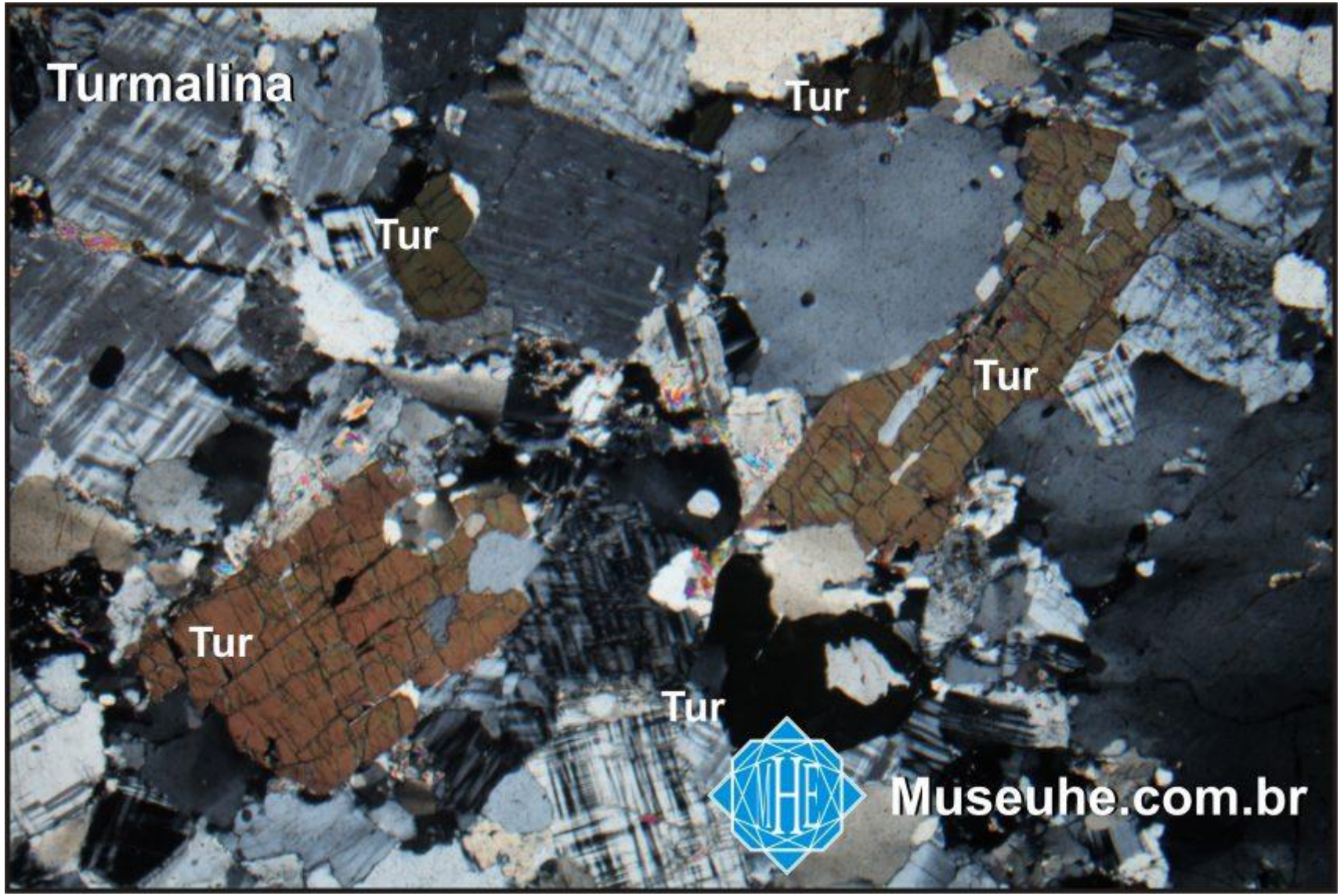


Figura 37: Cristais de Turmalina **(Tur) a NX.**

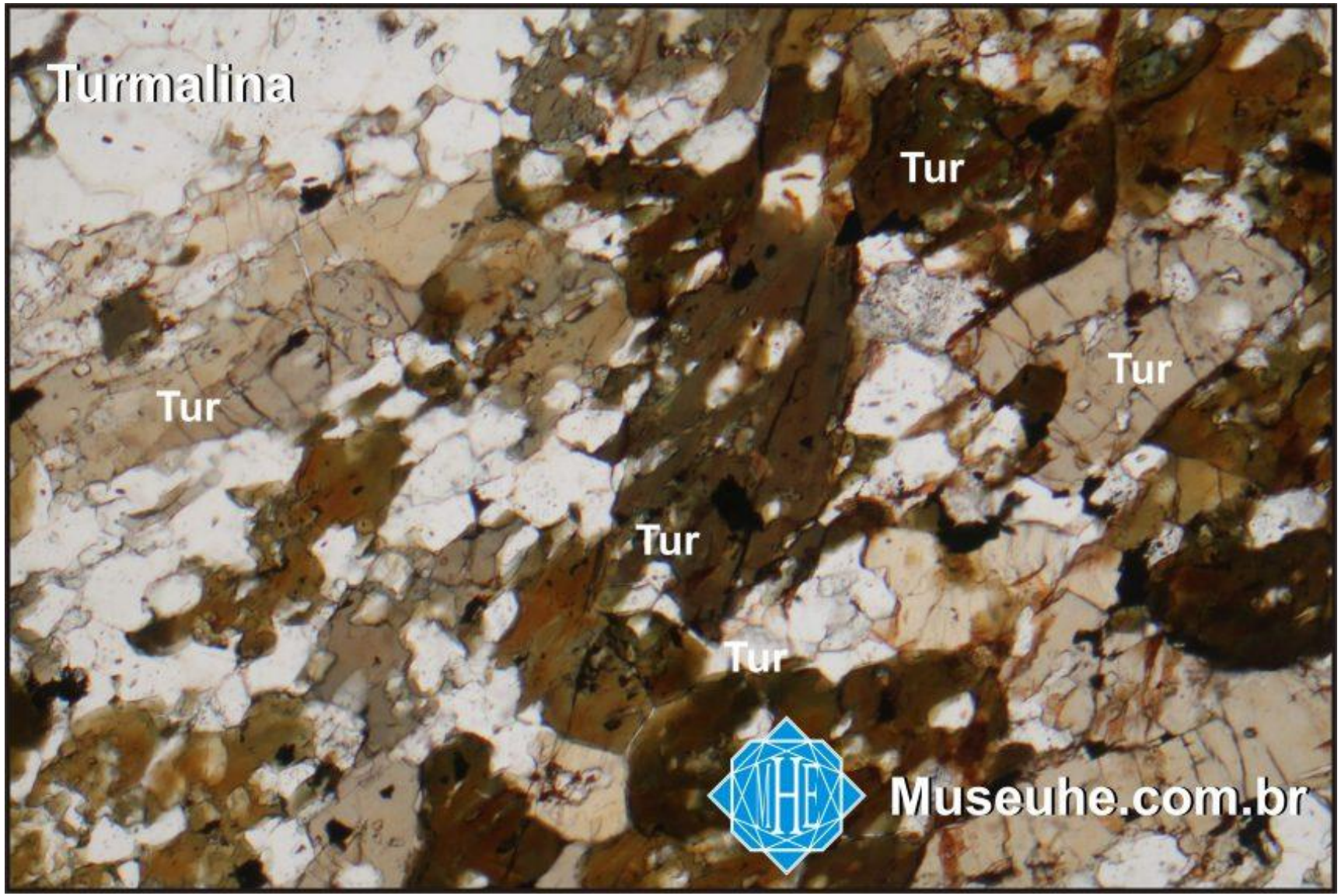


Figura 38: Cristais de Turmalina **(Tur) a NC.**

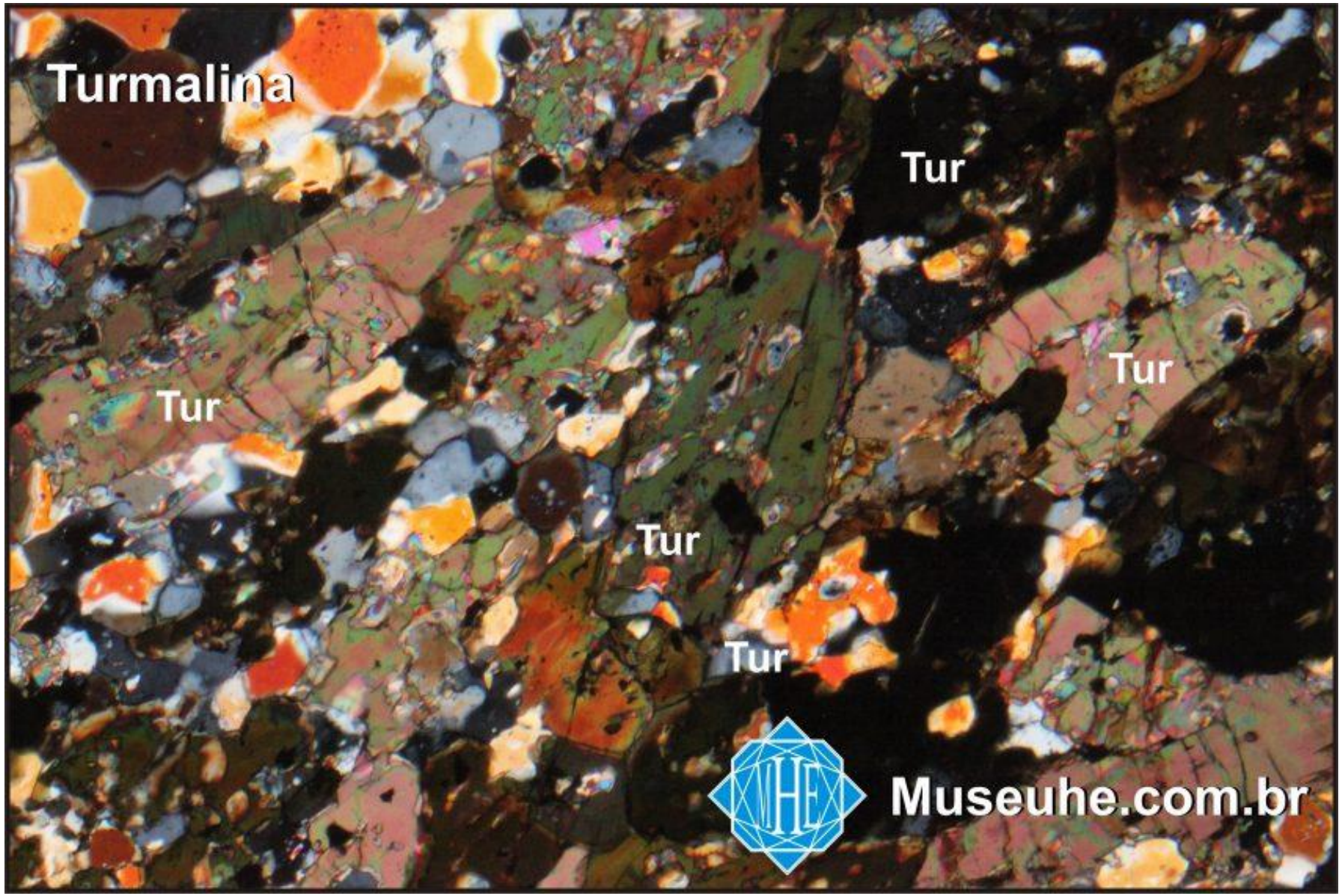


Figura 39: Cristais de Turmalina **(Tur) a NX.**

Figura 40: Cristais de Turmalina **(Tur) a NC.**

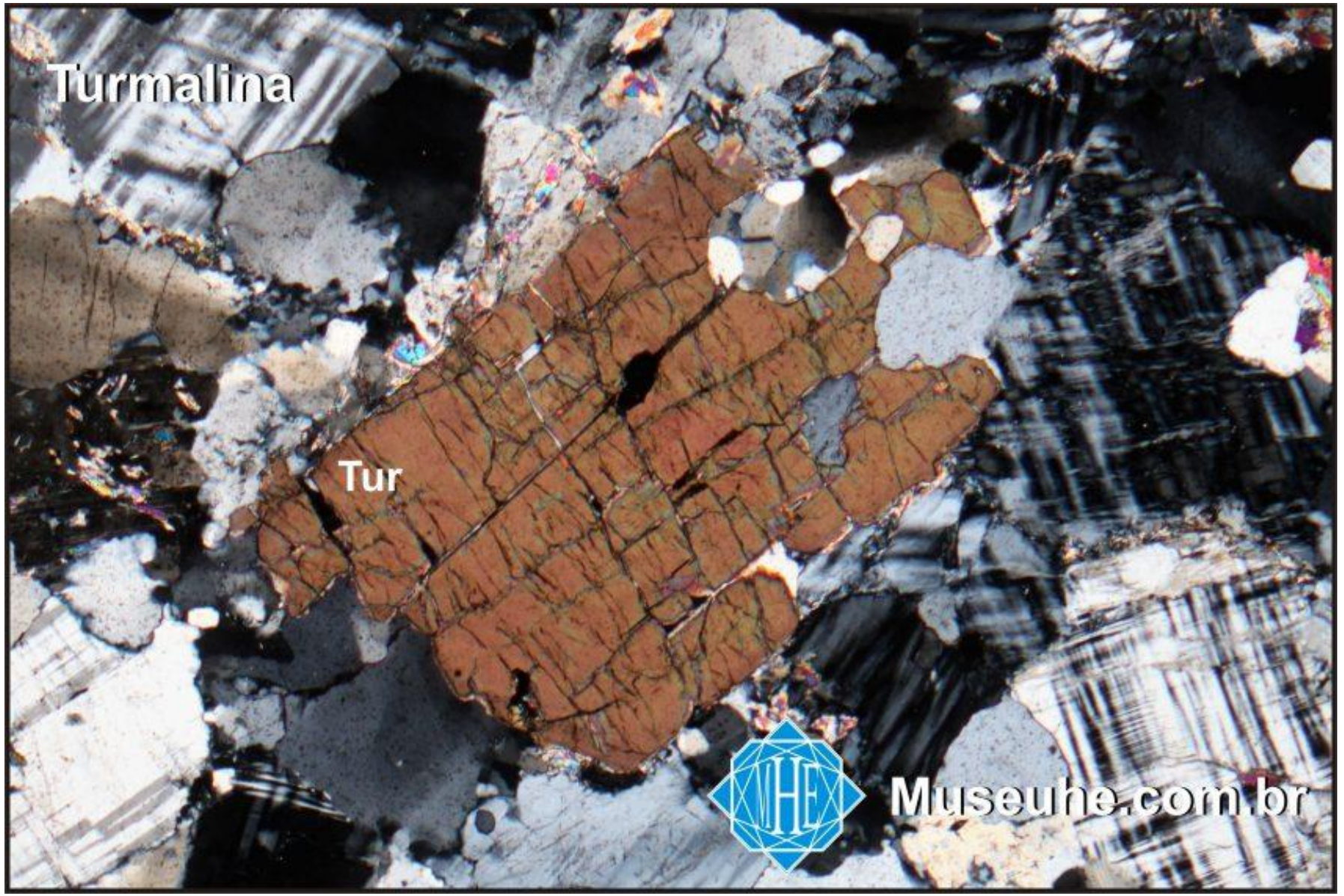


Figura 41: Cristais de Turmalina **(Tur) a NX.**

- **Apatita:**

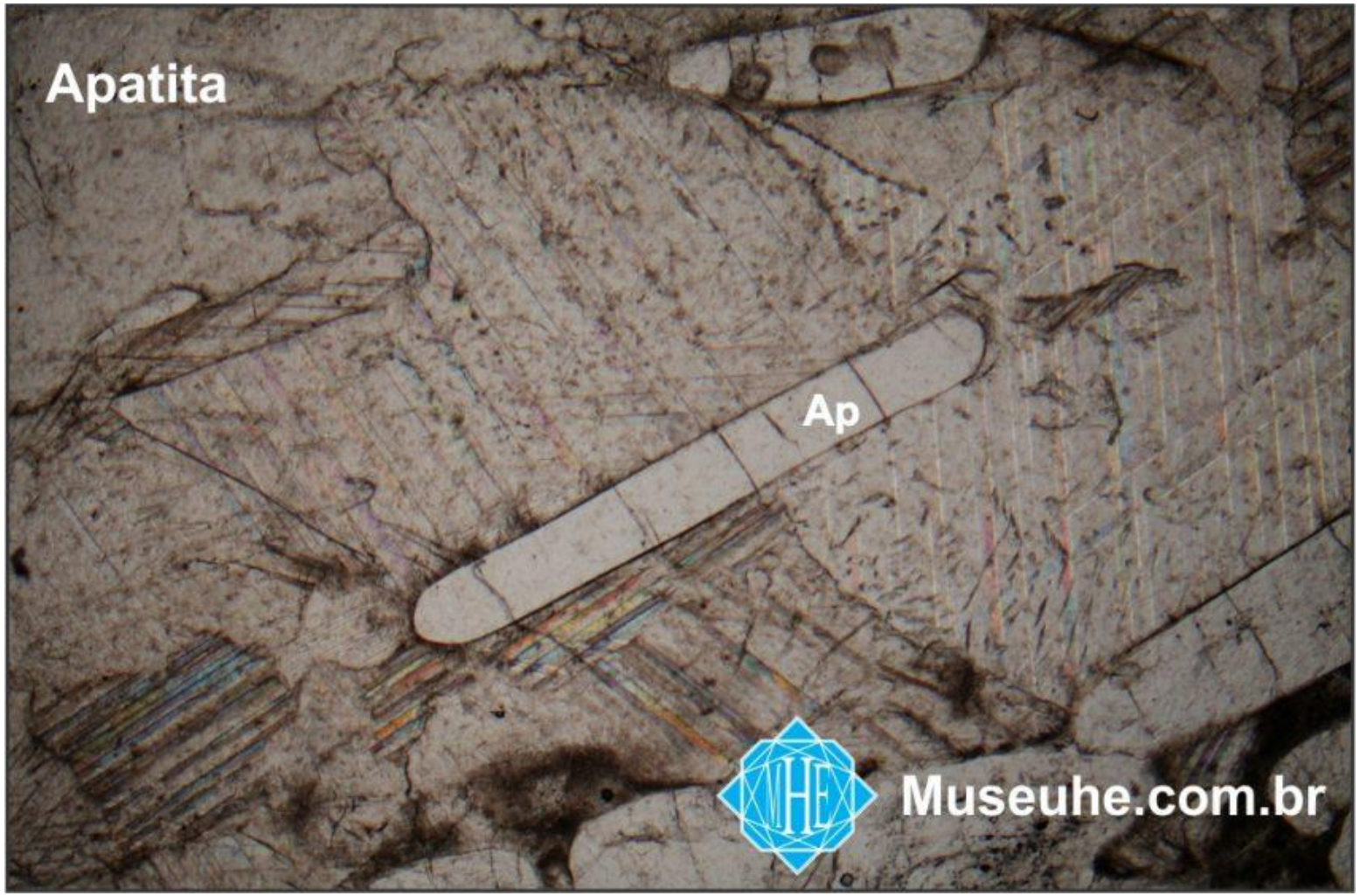


Figura 42: Cristal de Apatita (Ap) **a NC.**

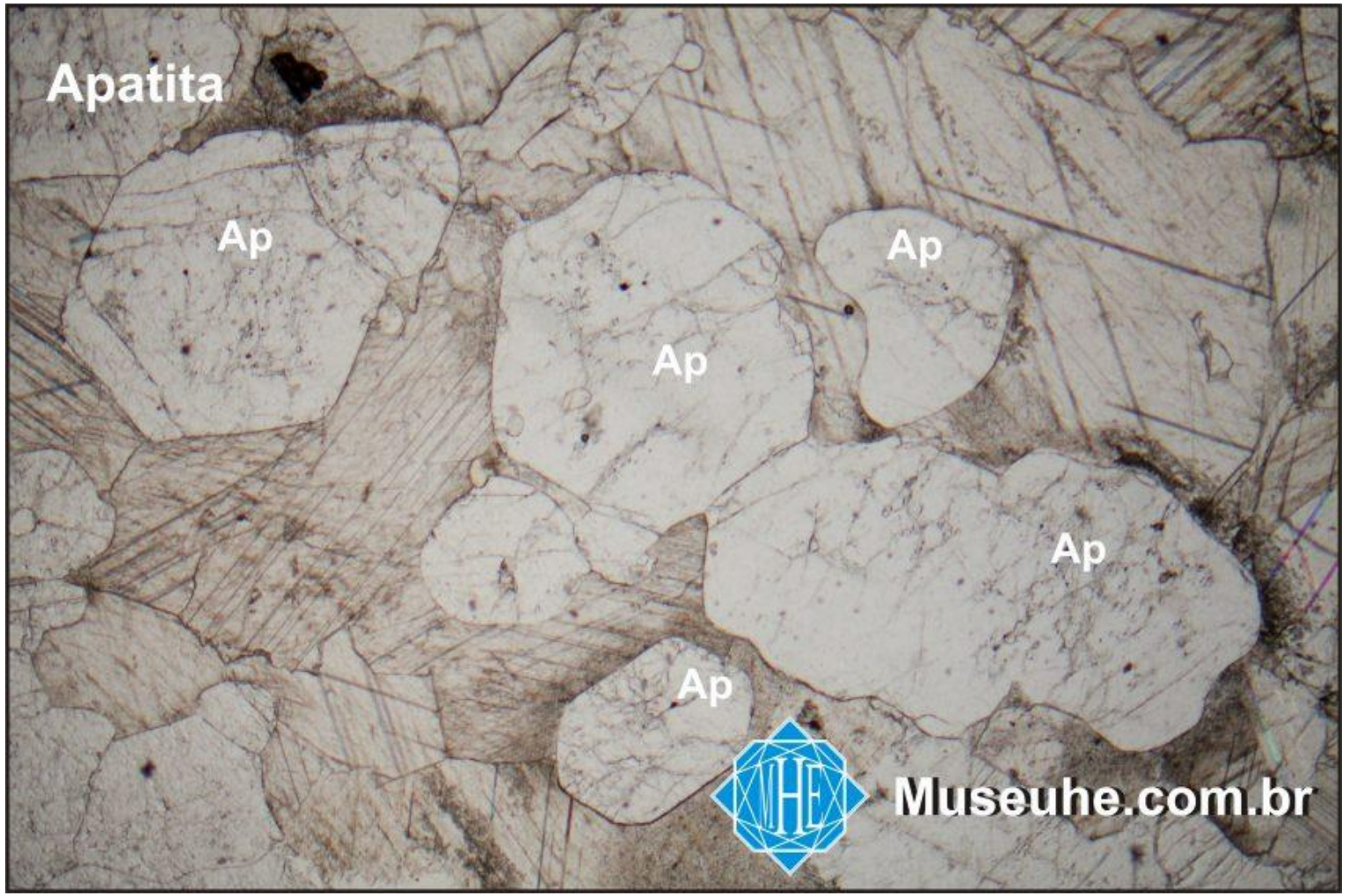


Figura 43: Cristais de Apatita (Ap) **a NC.**

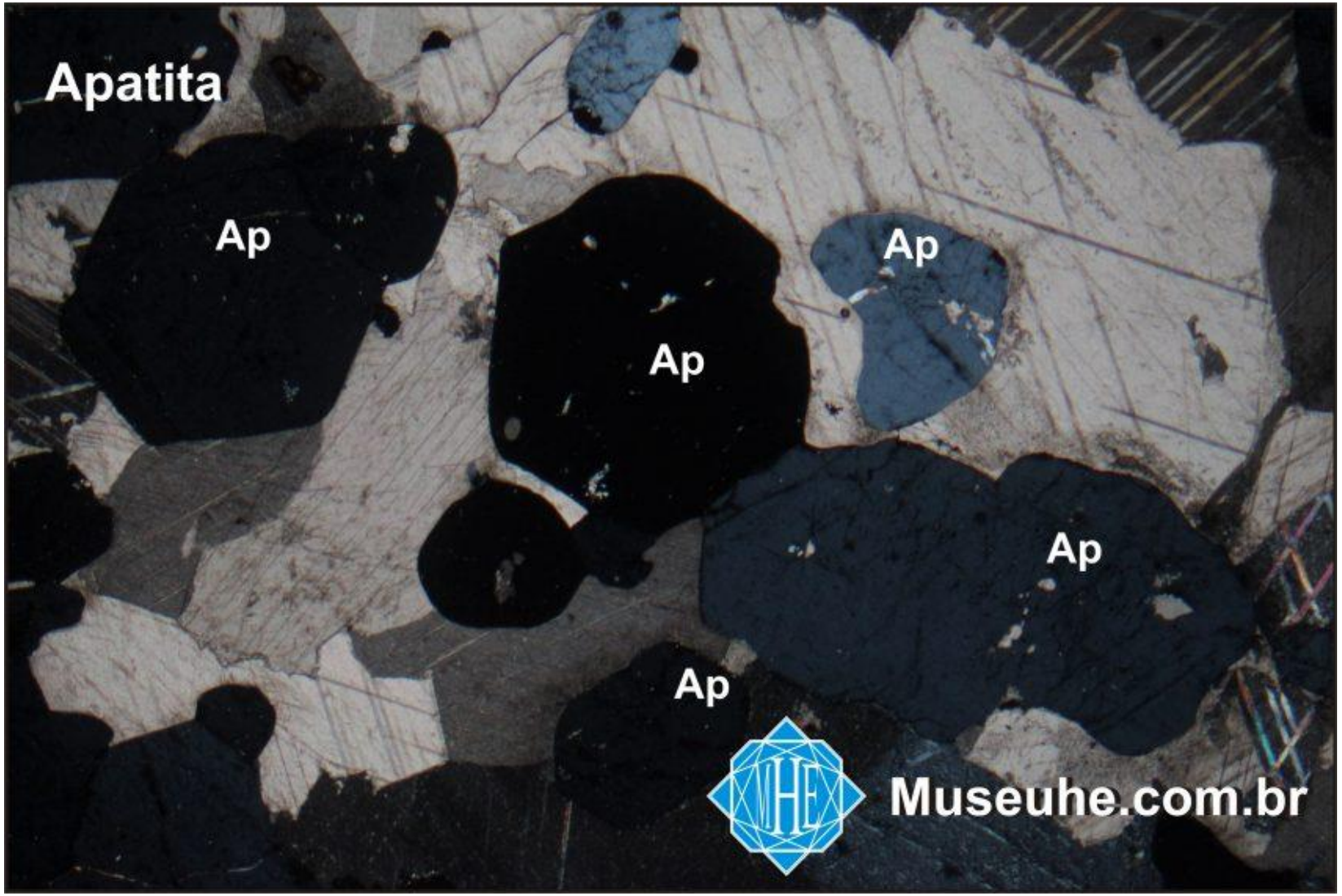


Figura 44: Cristais de Apatita (Ap) **a NX.**

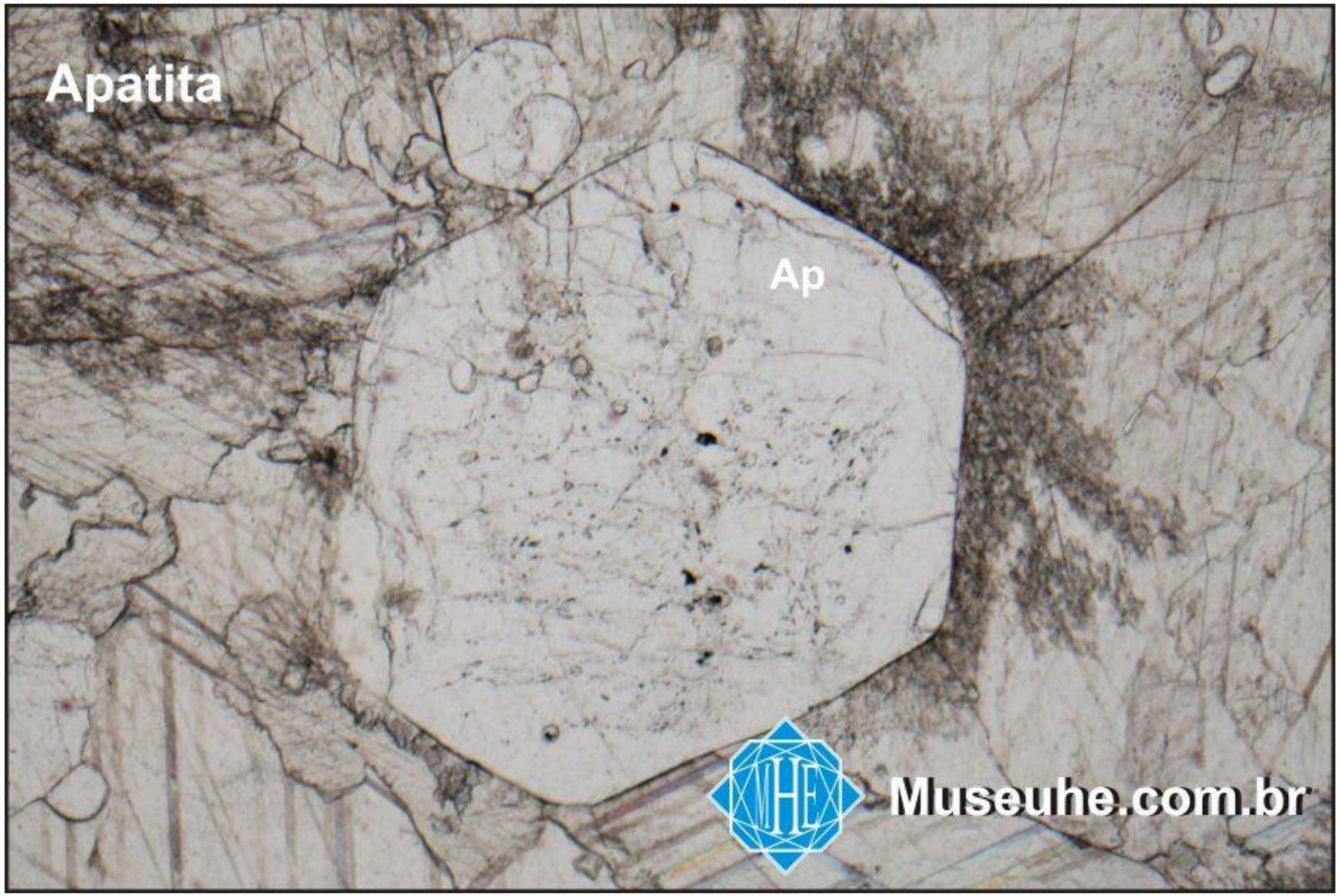


Figura 45: Cristal de Apatita (Ap) **a NC.**

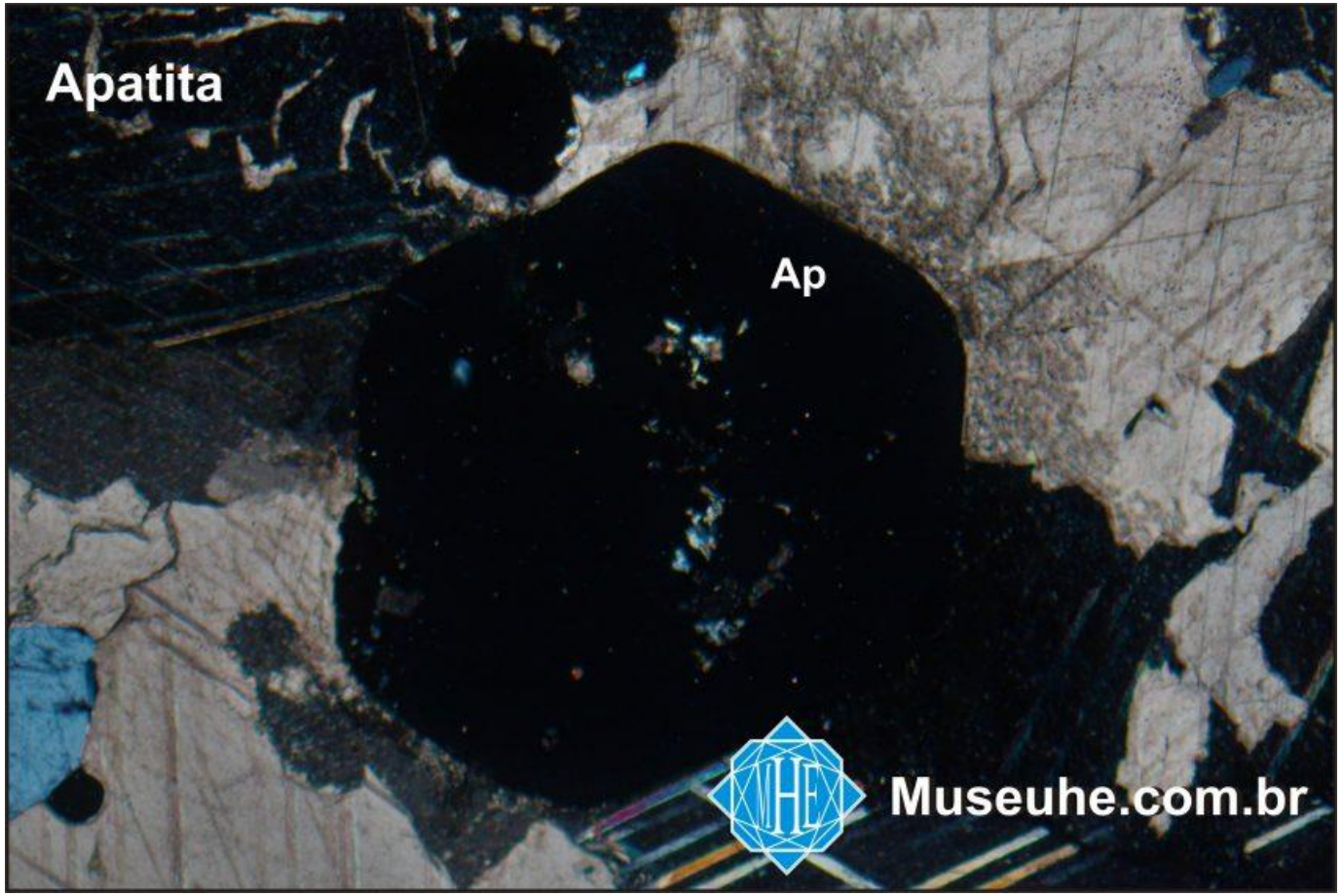


Figura 46: Cristal de Apatita (Ap) **a NX.**

- **Granada:**

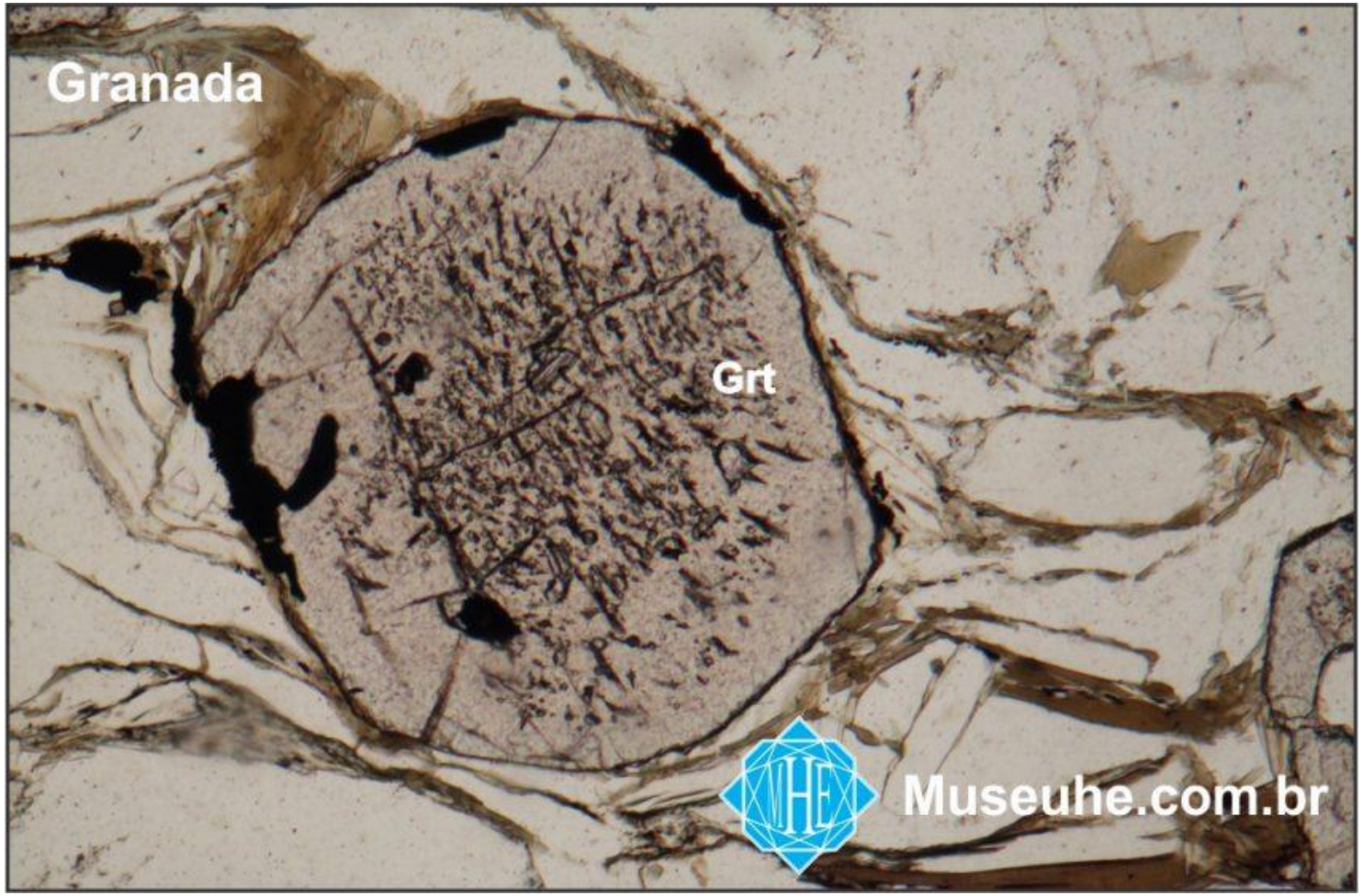


Figura 47: Cristal de Granada (Grt) **a NC.**

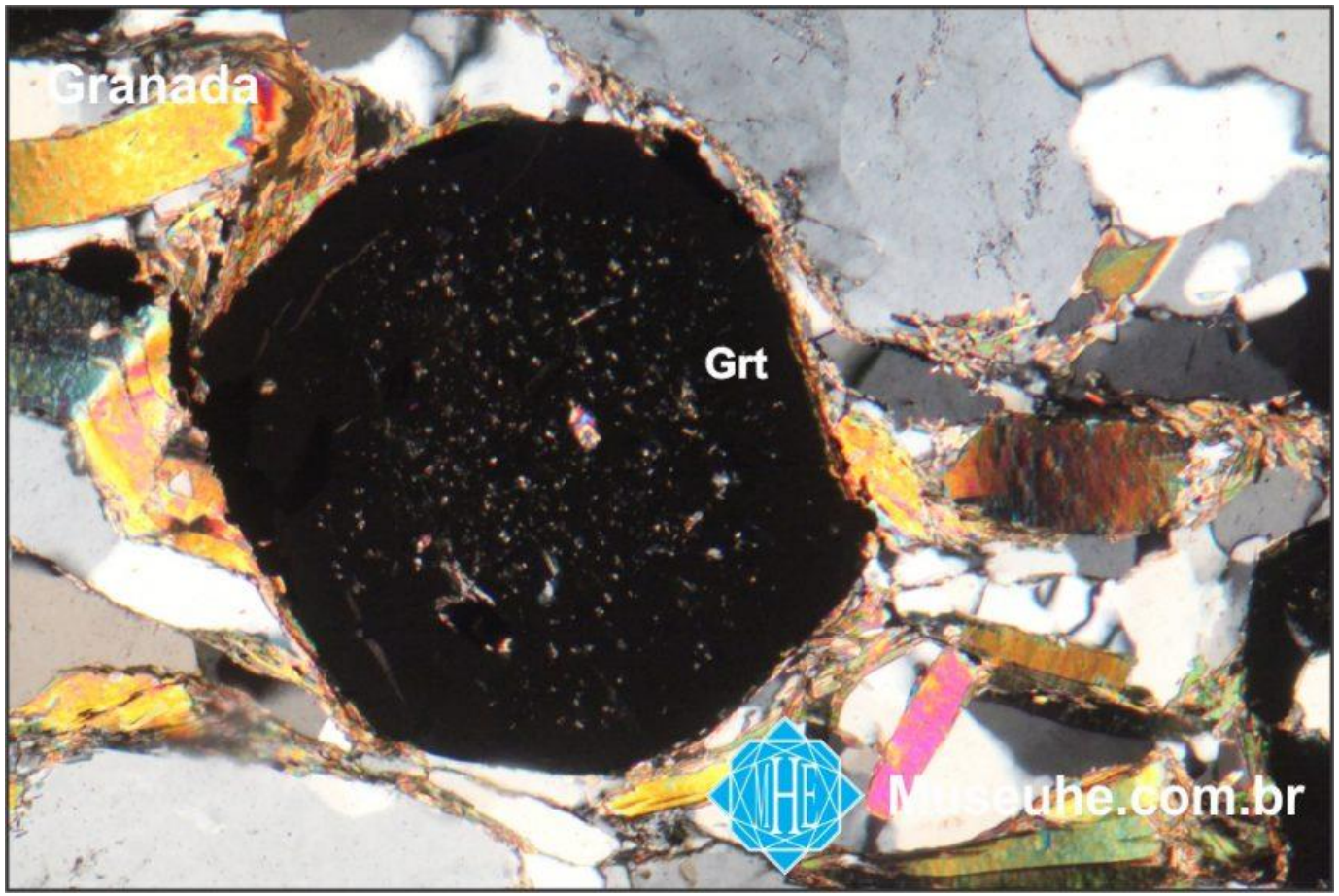


Figura 48: Cristal de Granada (Grt) **a NX.**

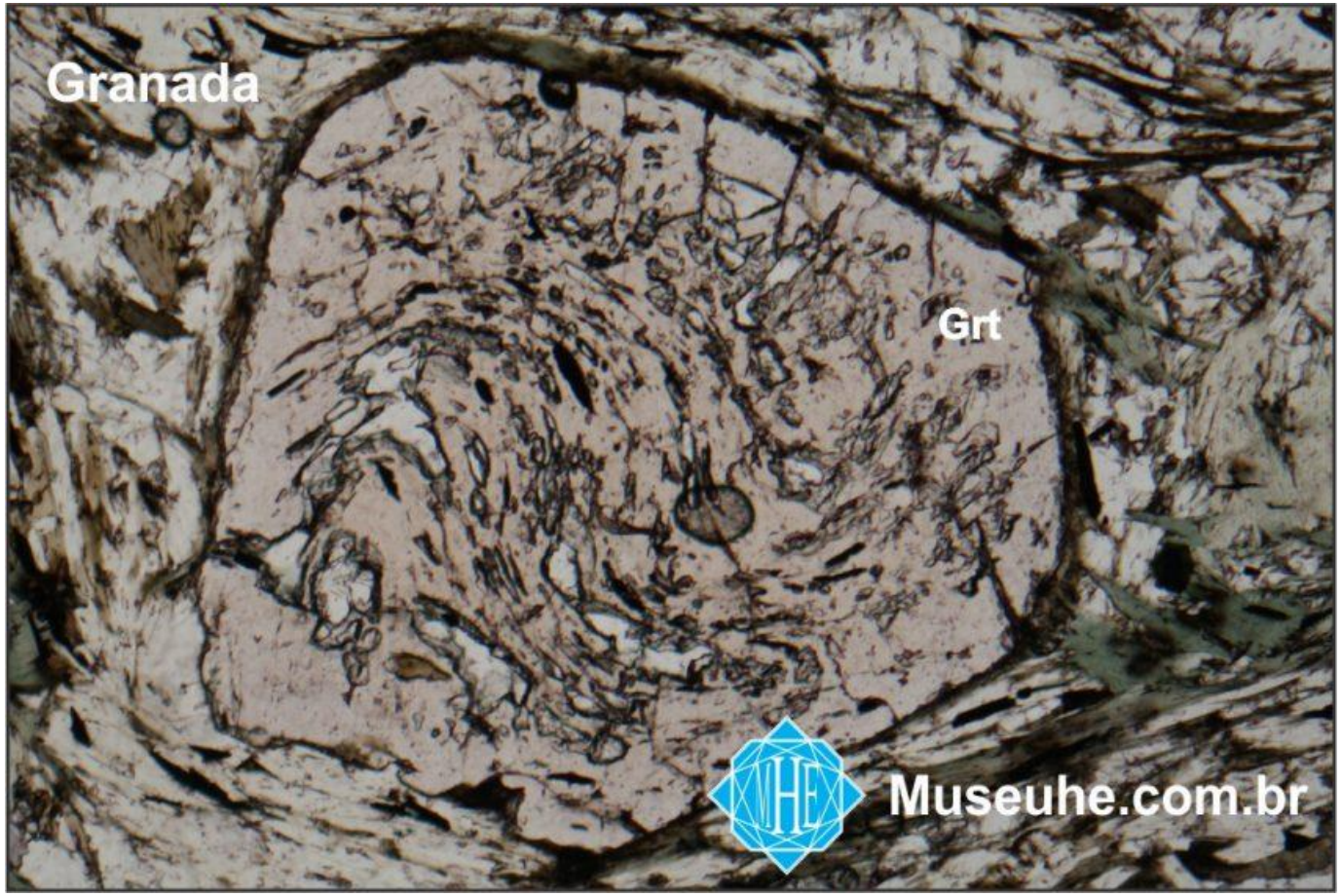


Figura 49: Cristal de Granada (Grt) **a NC.**

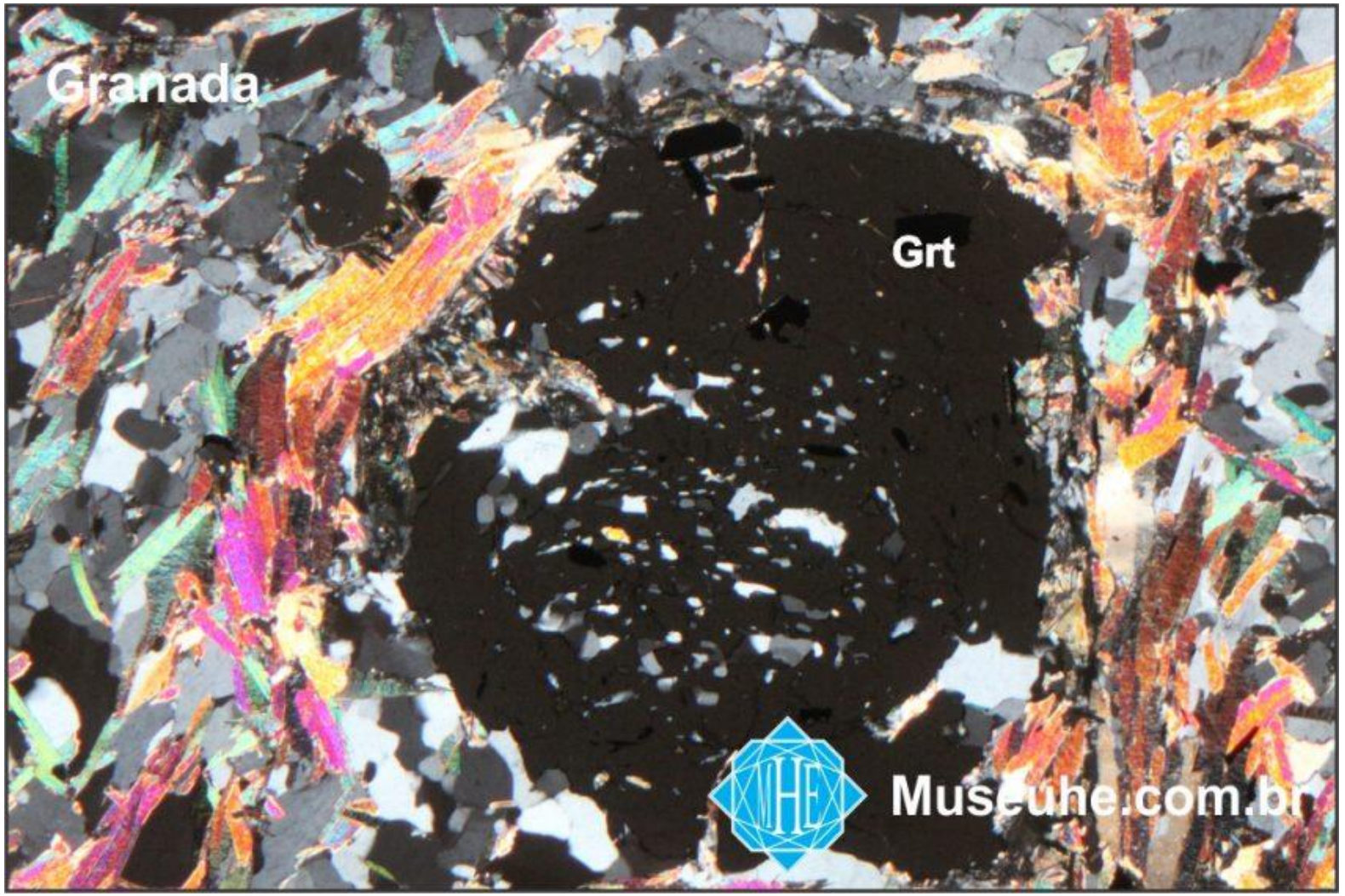


Figura 50: Cristal de Granada (Grt) **a NX.**

- **Olivina:**

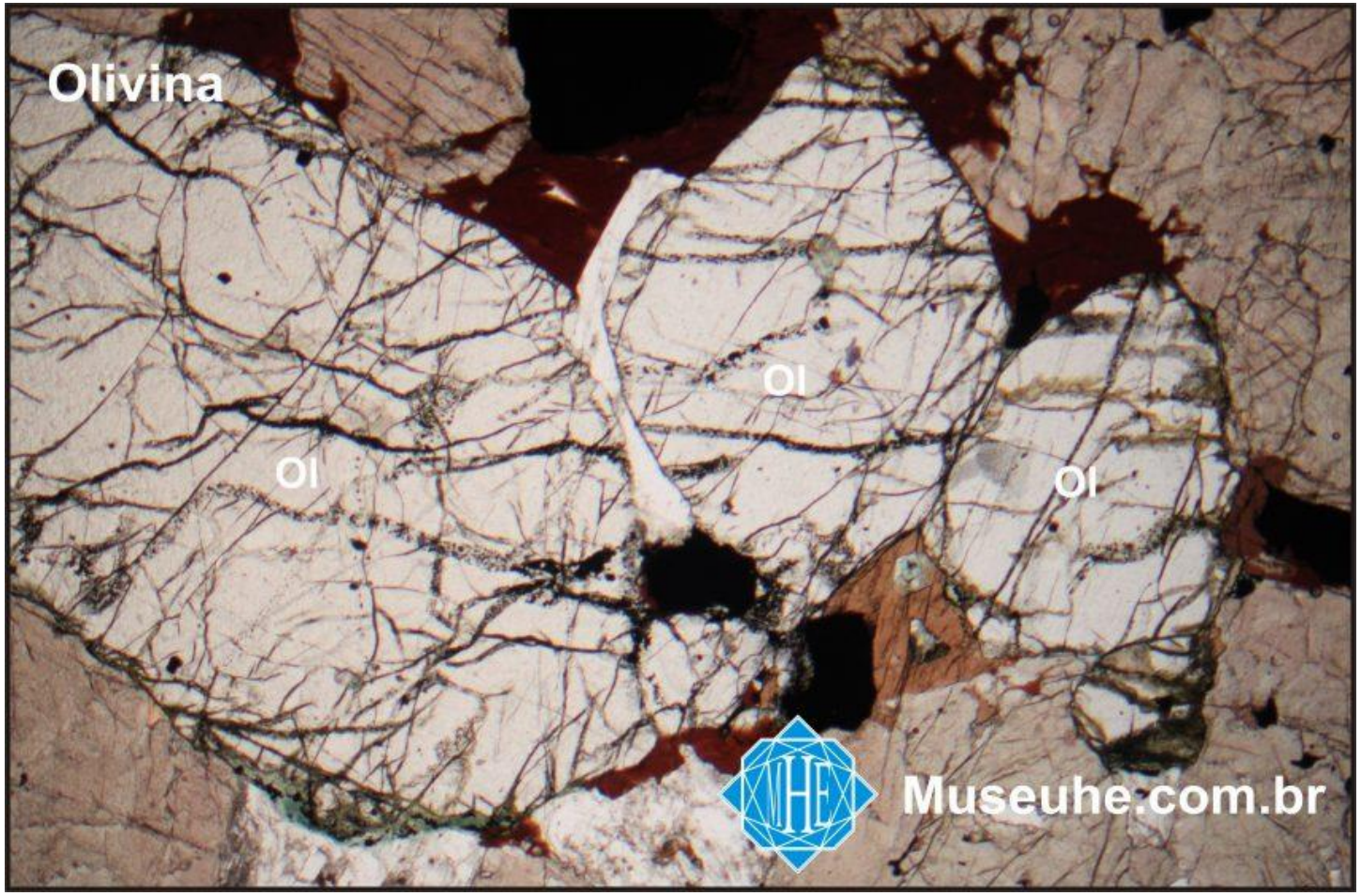


Figura 51: Cristais de Olivina (Ol) **a NC.**

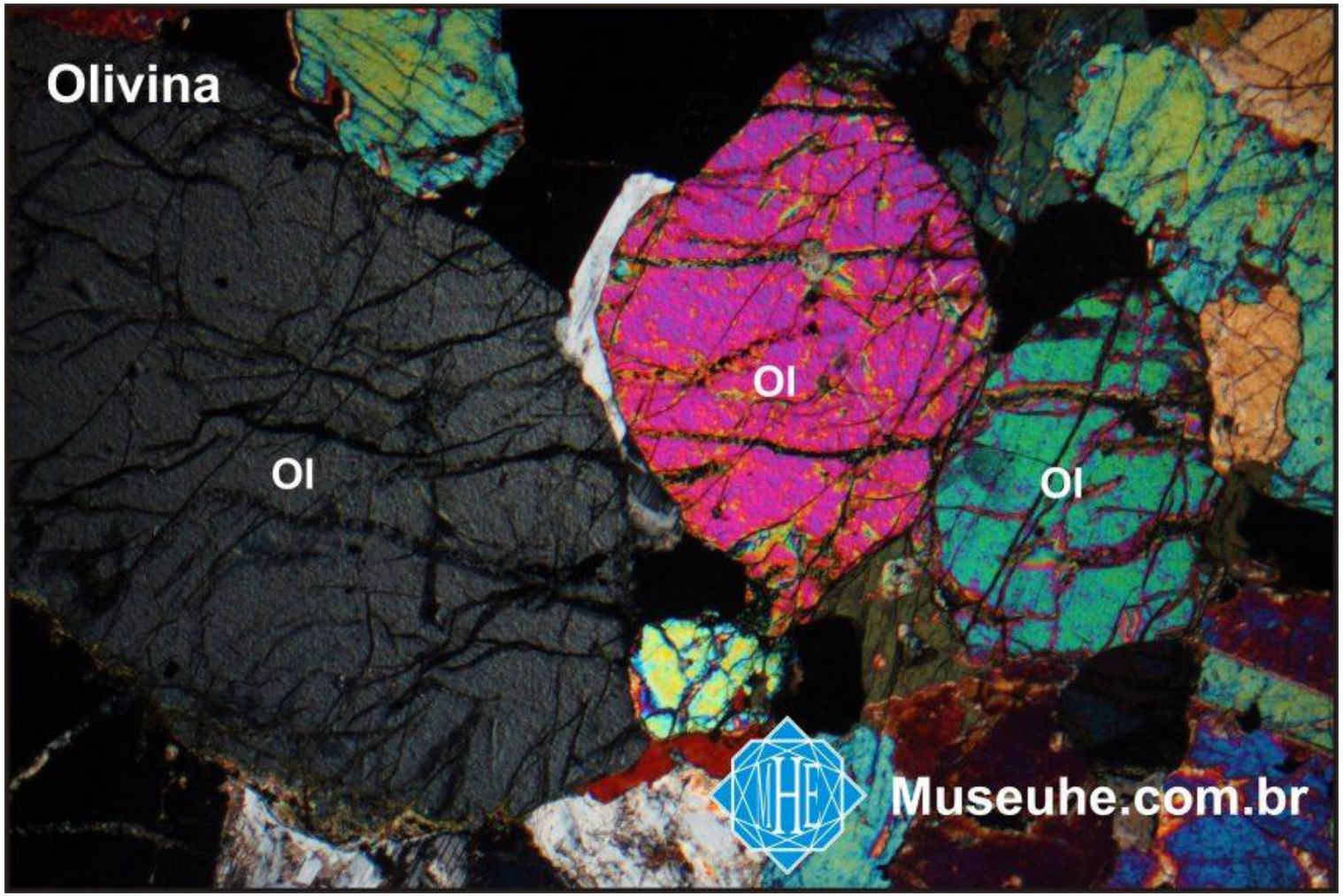


Figura 52: Cristais de Olivina (Ol) **a NX.**

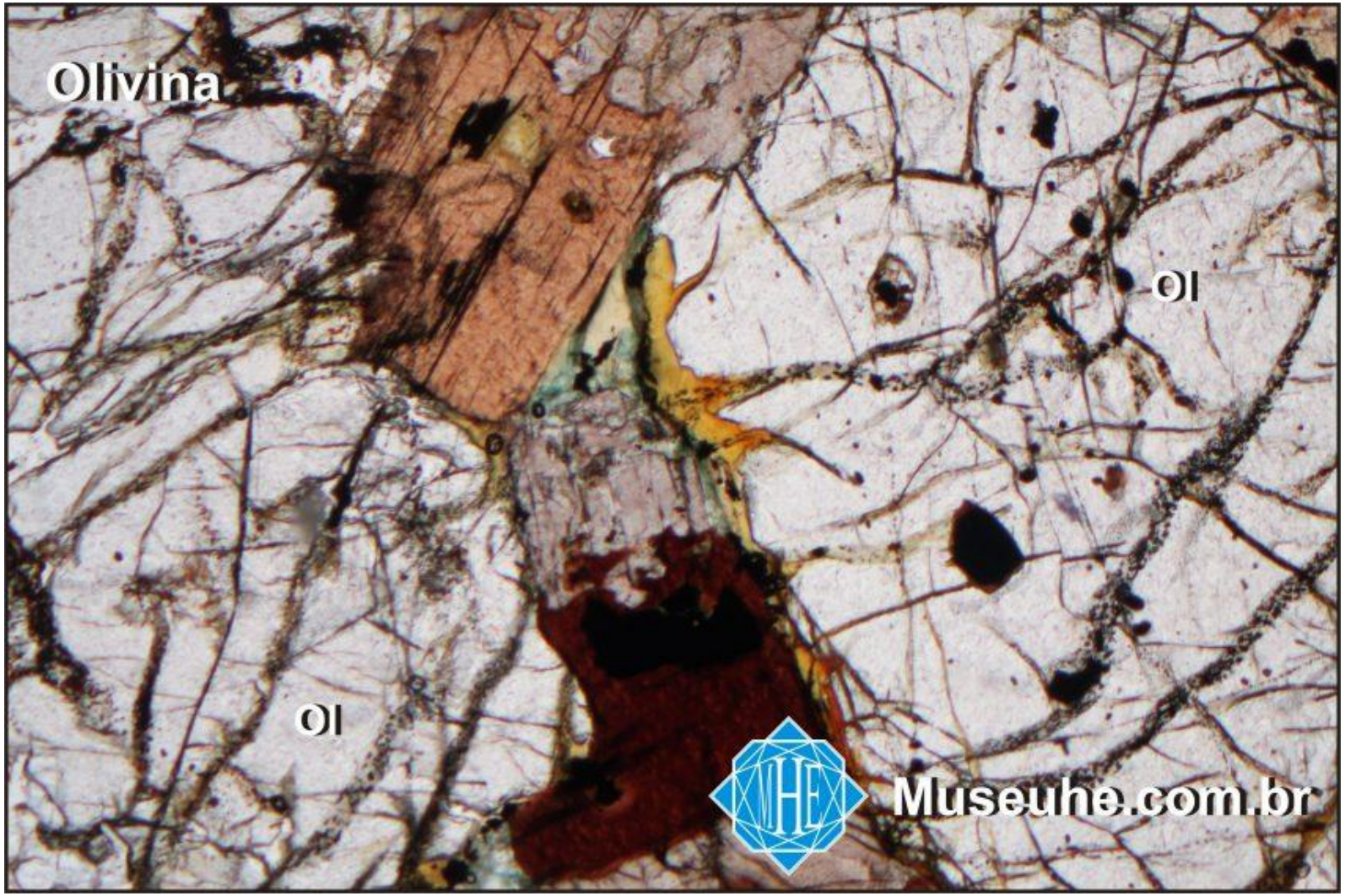


Figura 53: Cristais de Olivina (Ol) **a NC.**

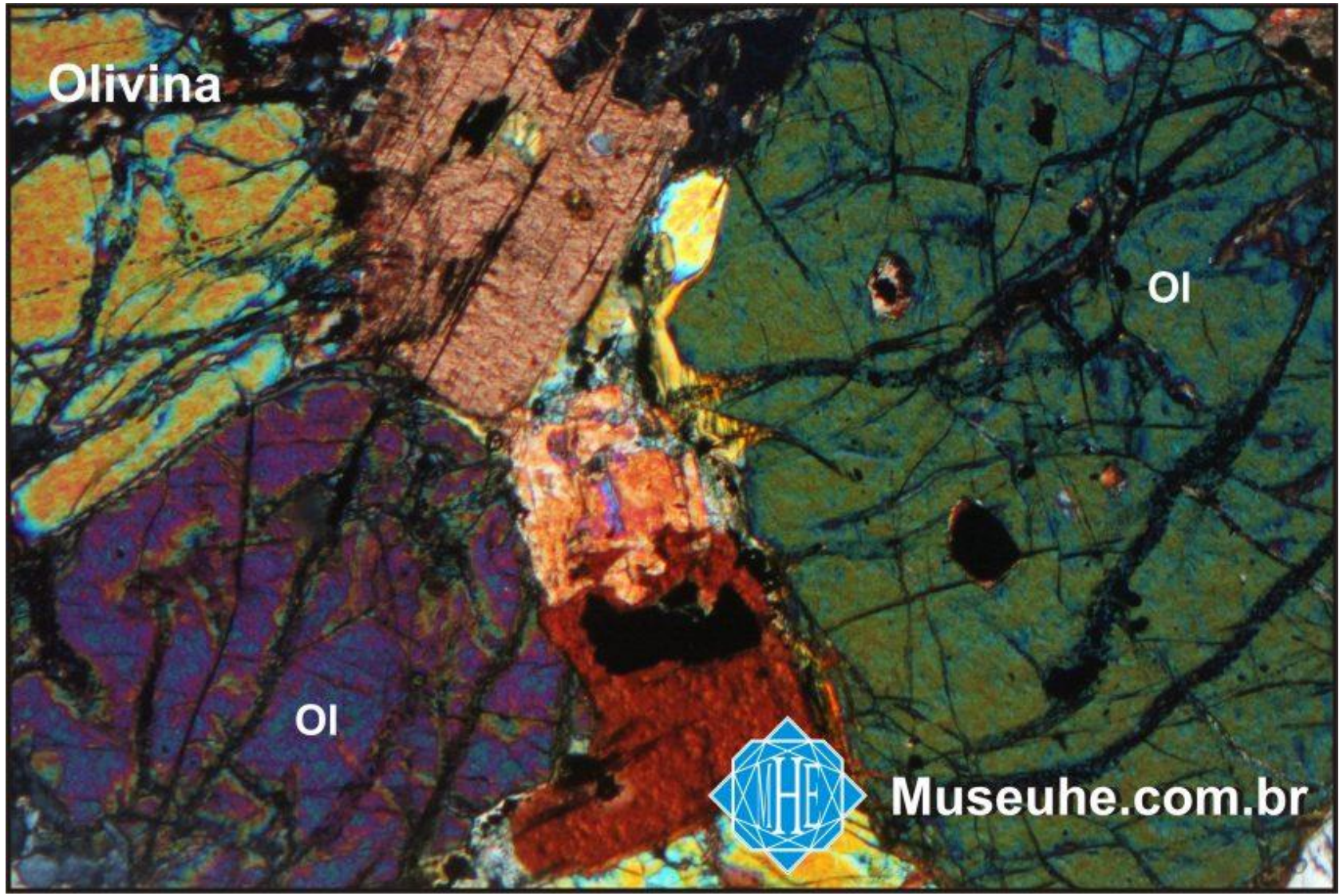


Figura 54: Cristais de Olivina (Ol) **a NX.**

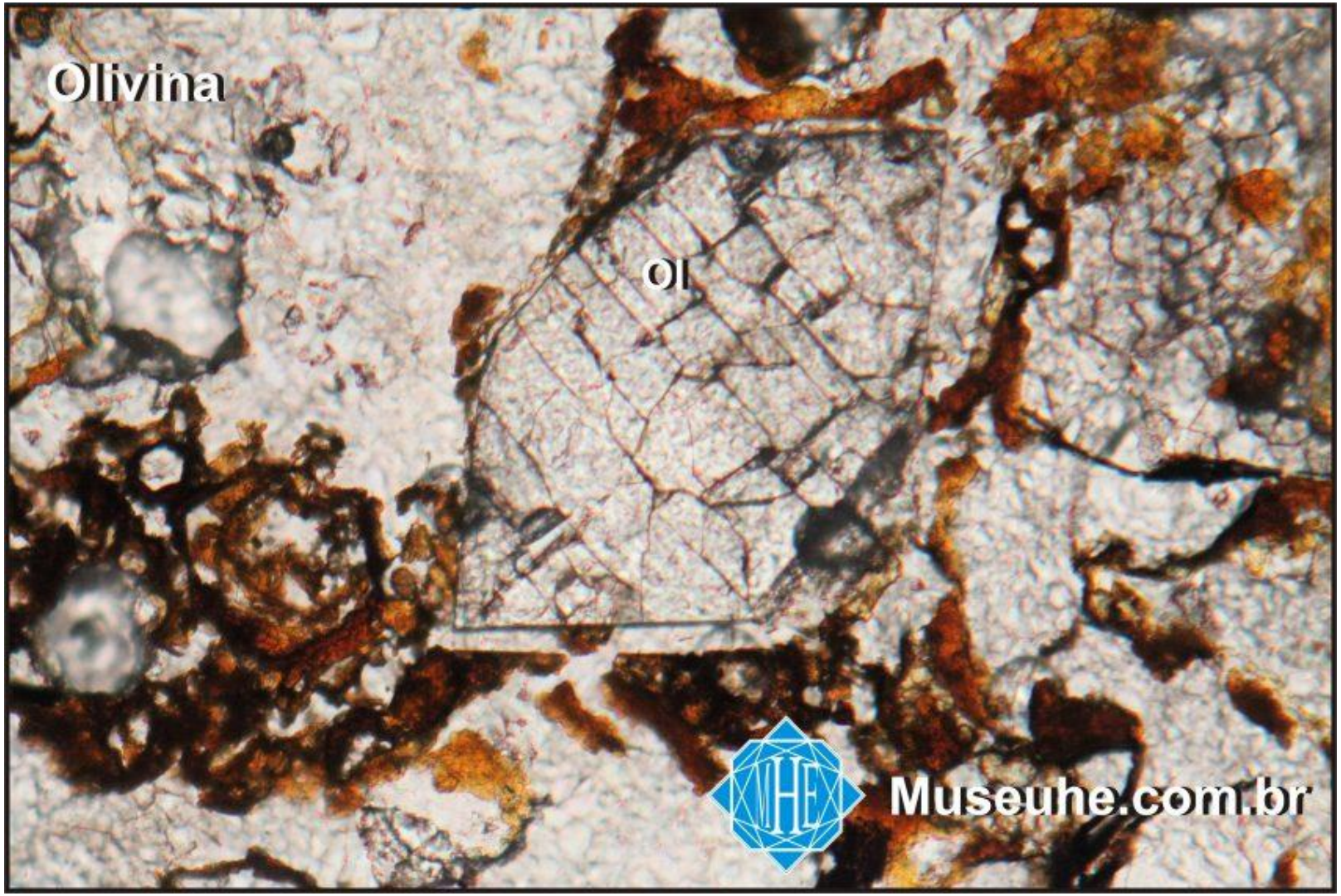


Figura 55: Cristais de Olivina (Ol) **a NC.**

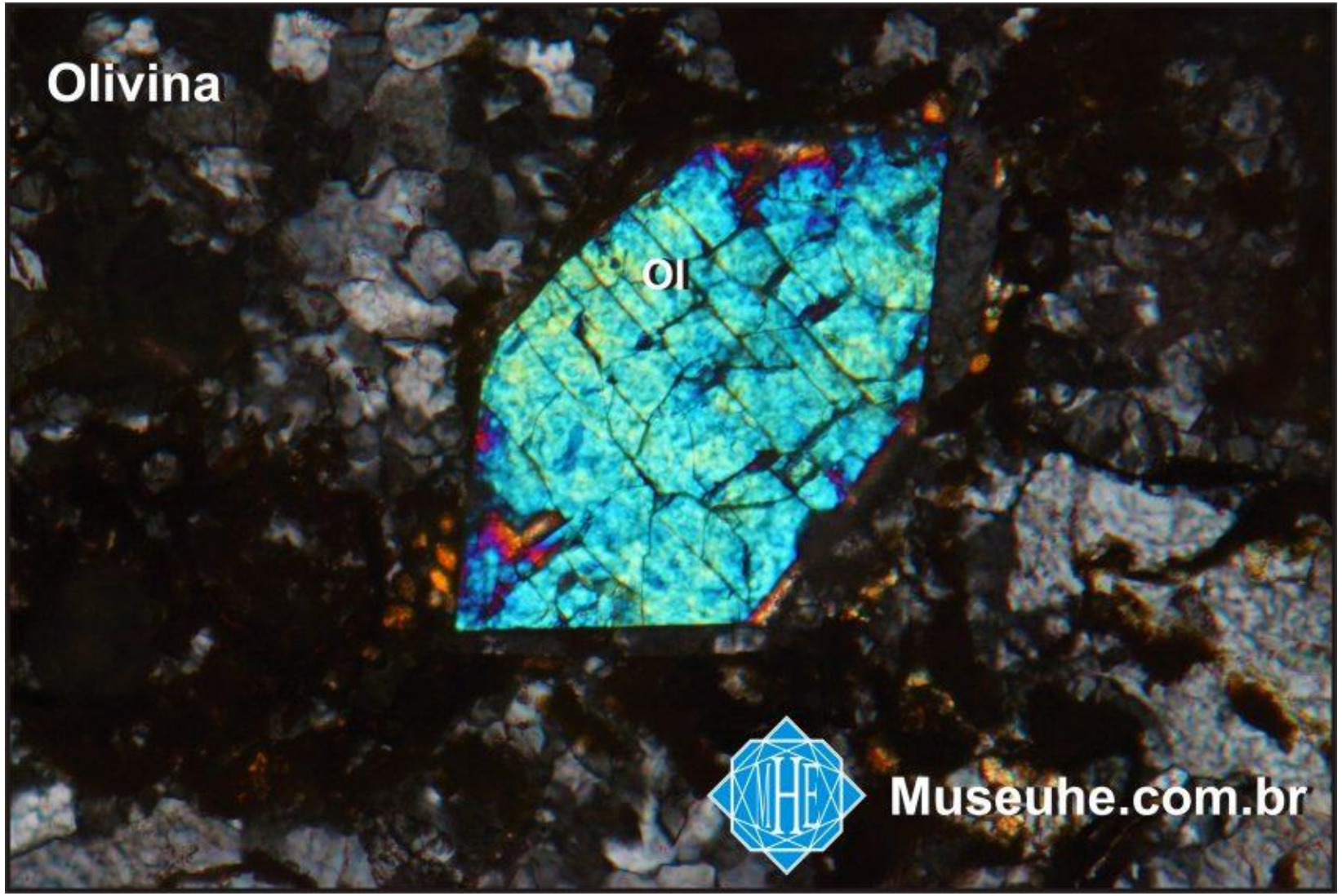


Figura 56: Cristais de Olivina (Ol) **a NX.**

- **Actinolita (Anfibólio):**

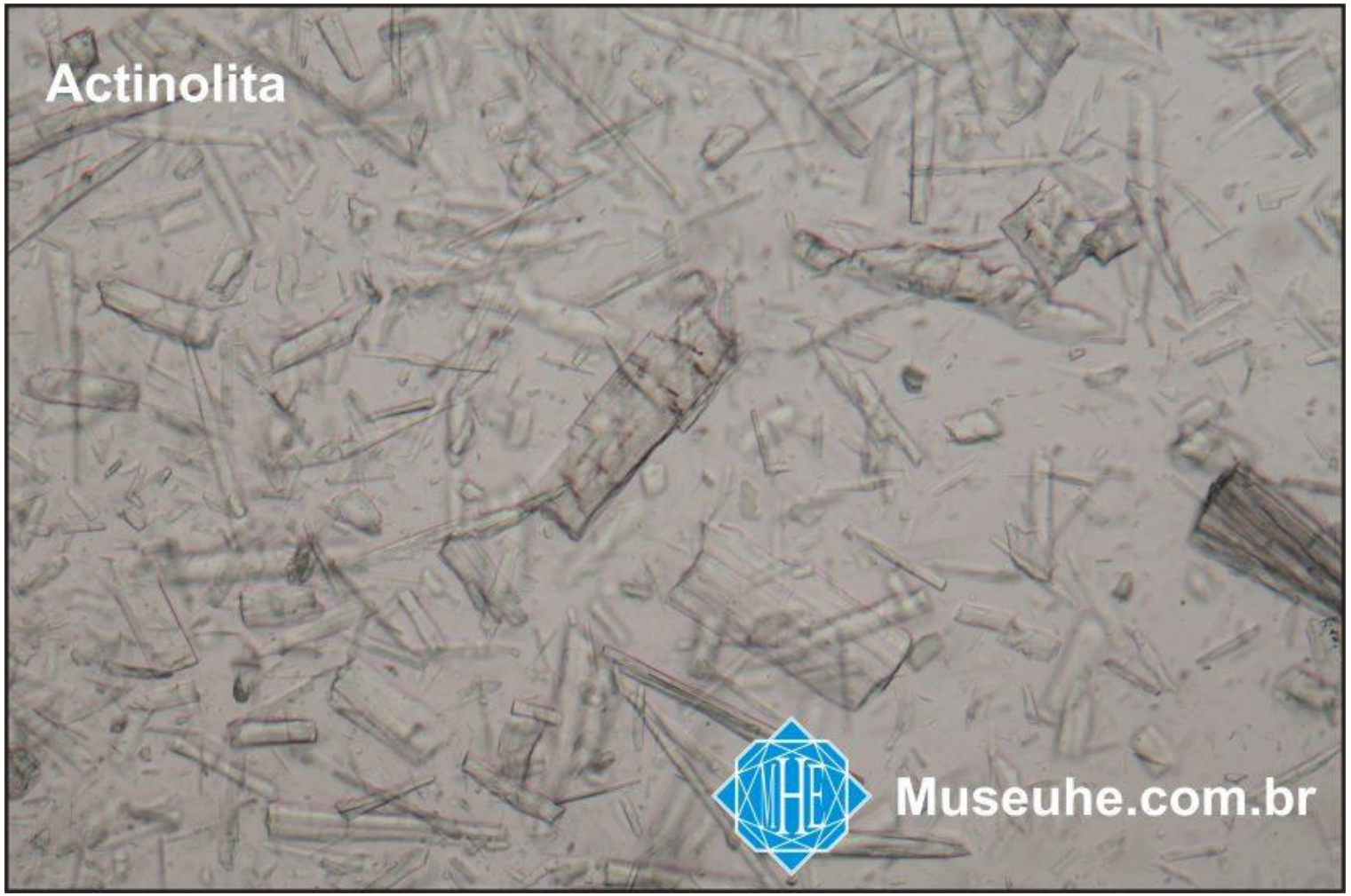


Figura 57: Cristais de Actinolita **a NC.**

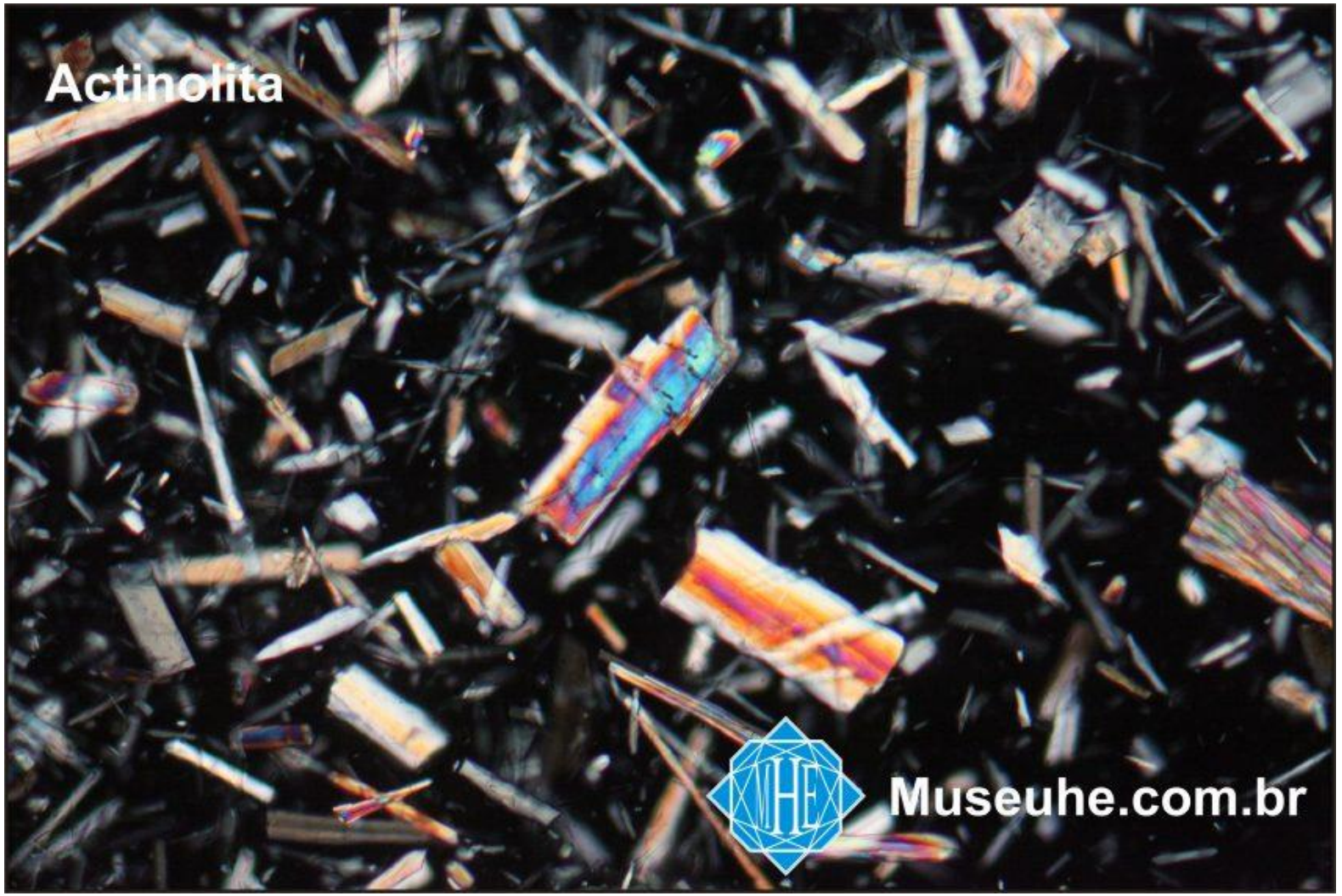


Figura 58: Cristais de Actinolita **a NX.**

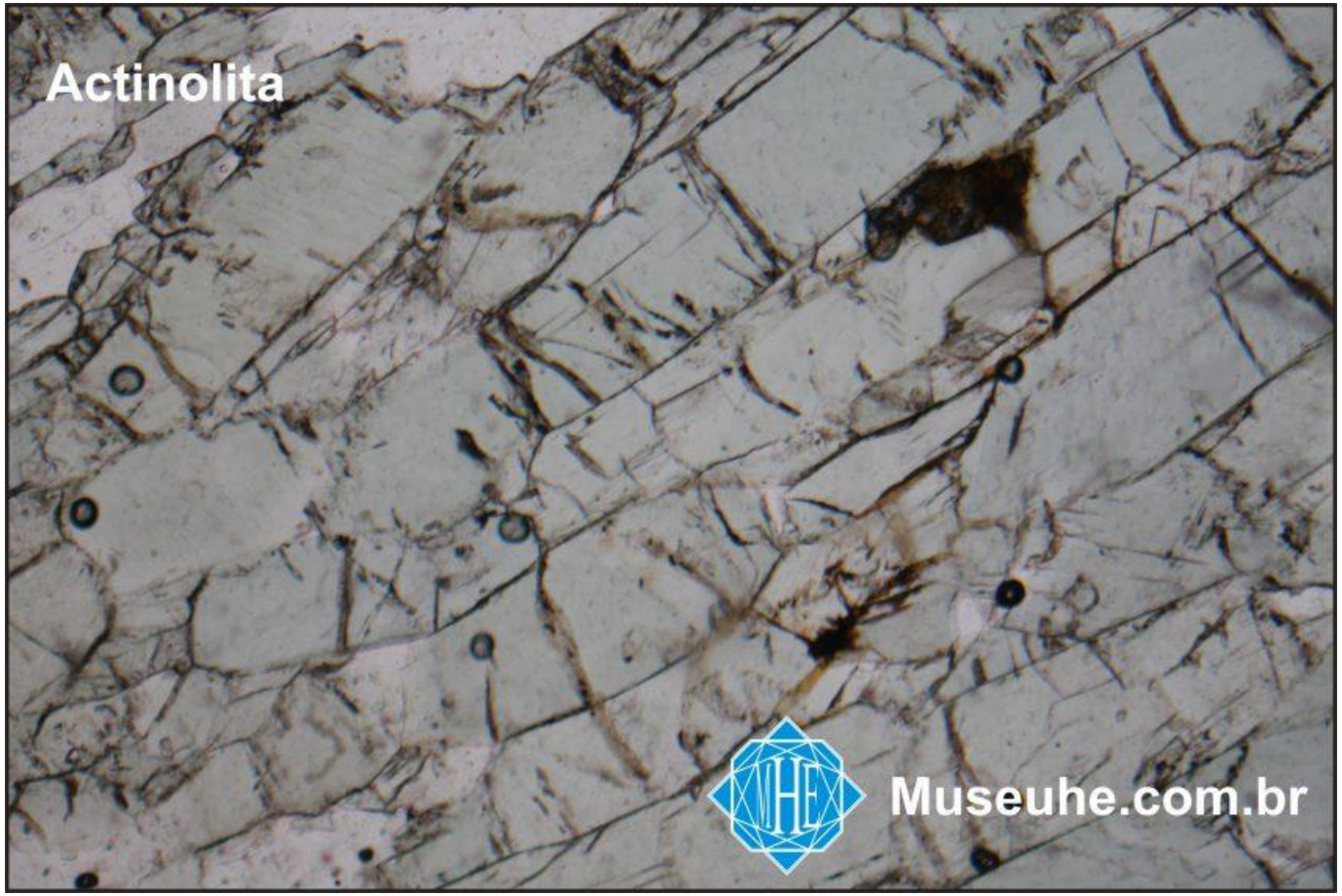


Figura 59: Cristais de Actinolita **a NC.**

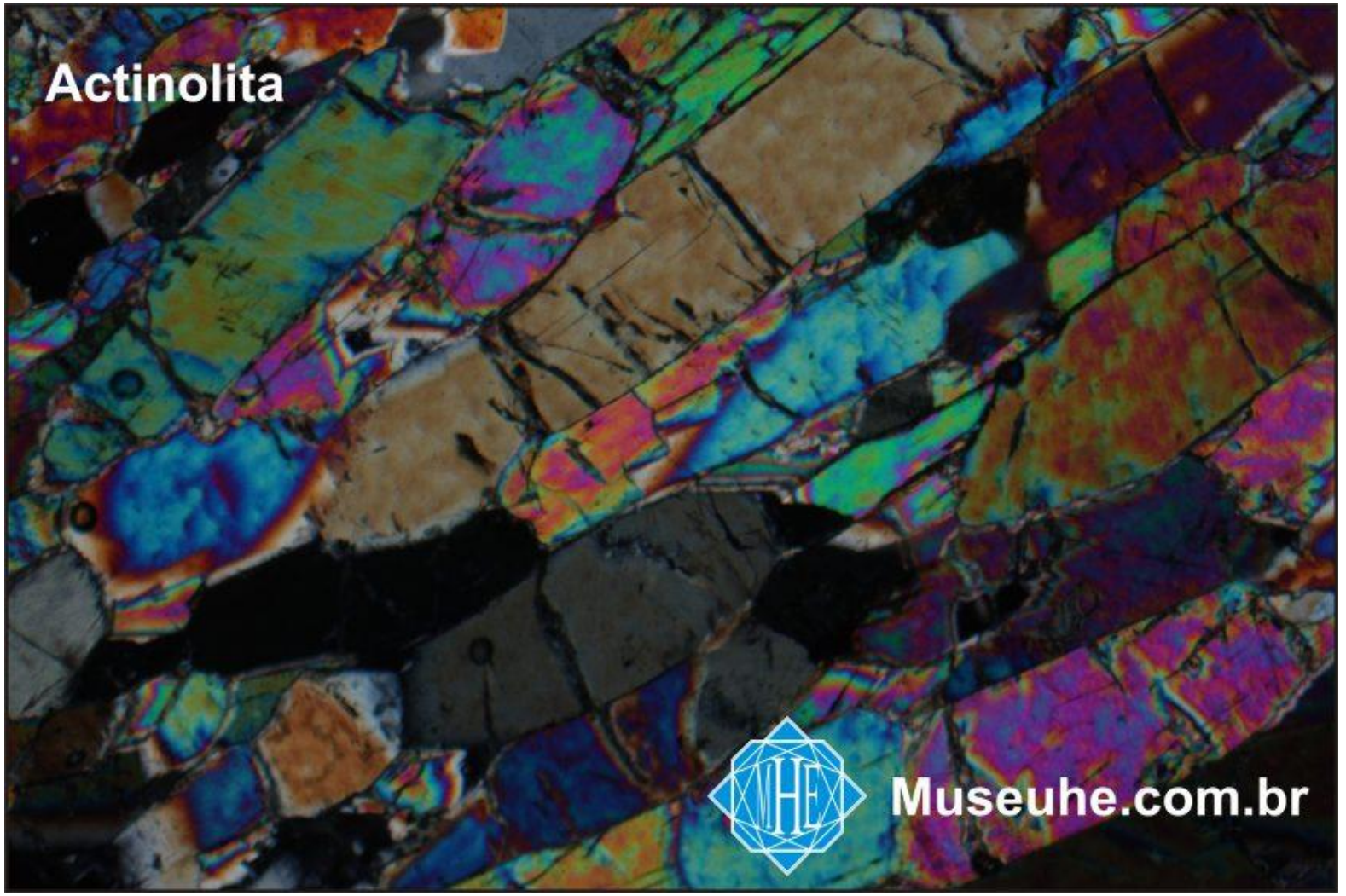


Figura 60: Cristais de Actinolita **a NX.**

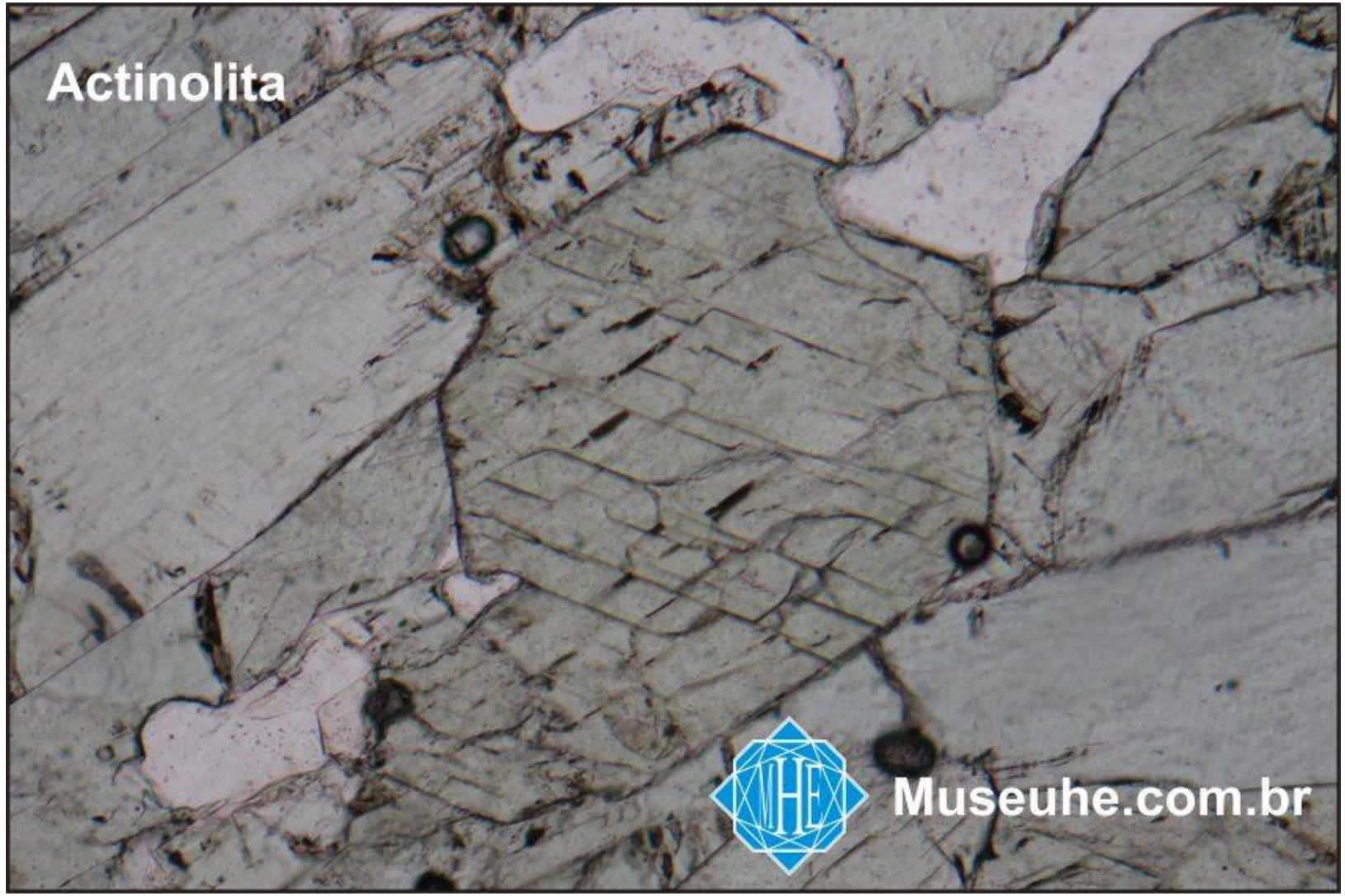


Figura 61: Cristal de Actinolita **a NC.**

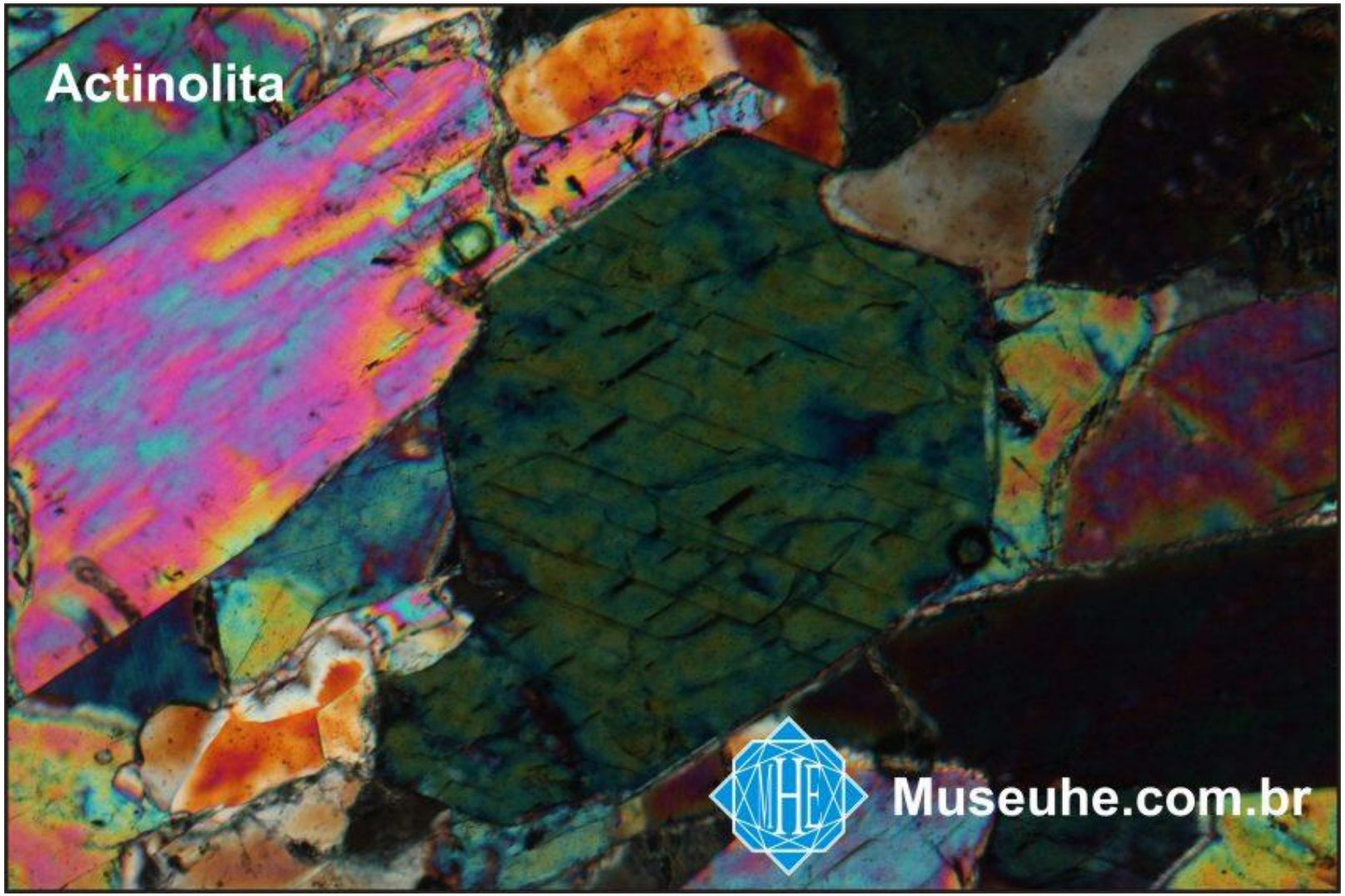


Figura 62: Cristais de Actinolita **a NX.**

- **Tremolita(Anfibólio):**

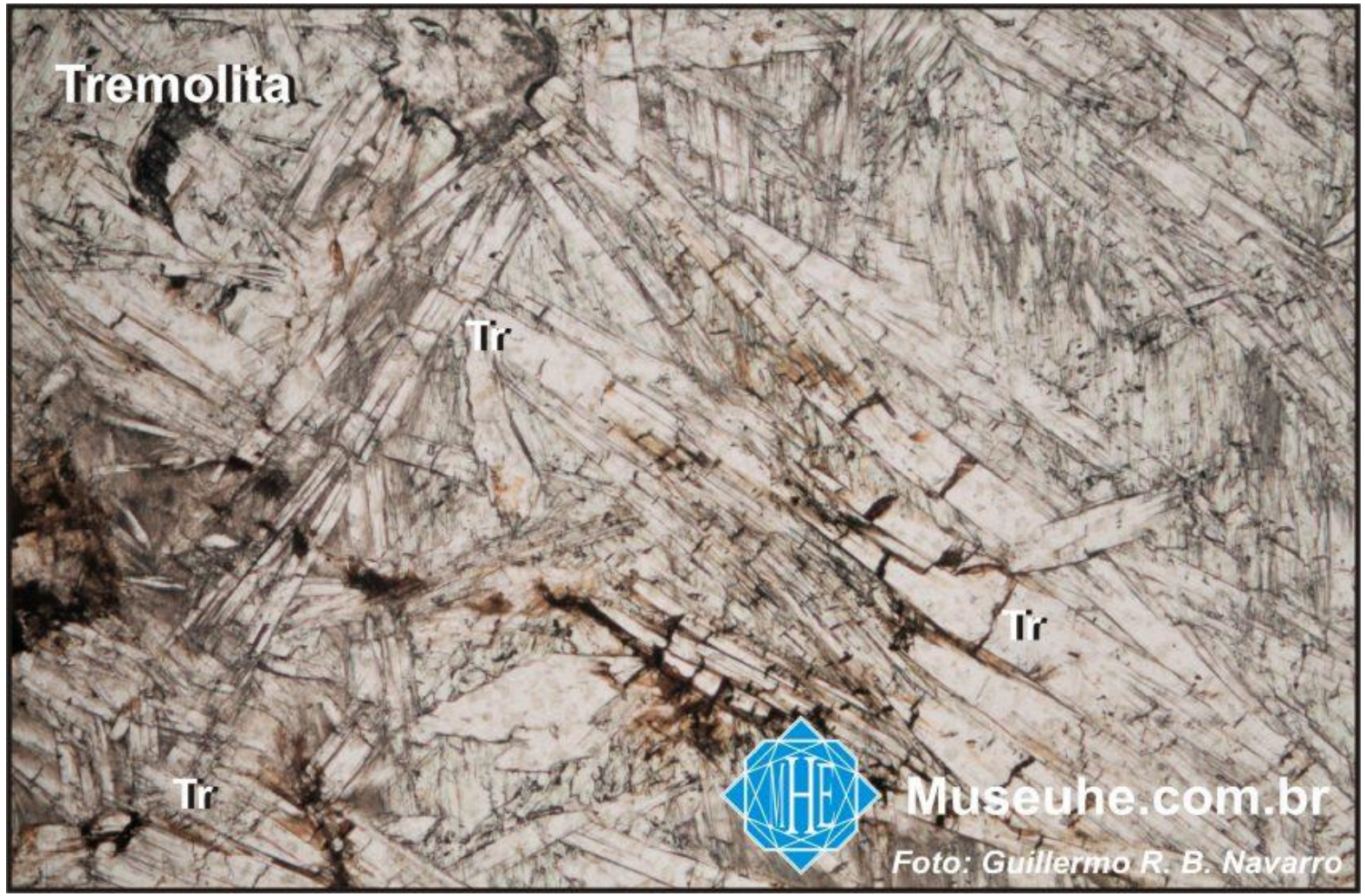


Figura 63: Cristais de Tremolita (Tr) **a NC.**

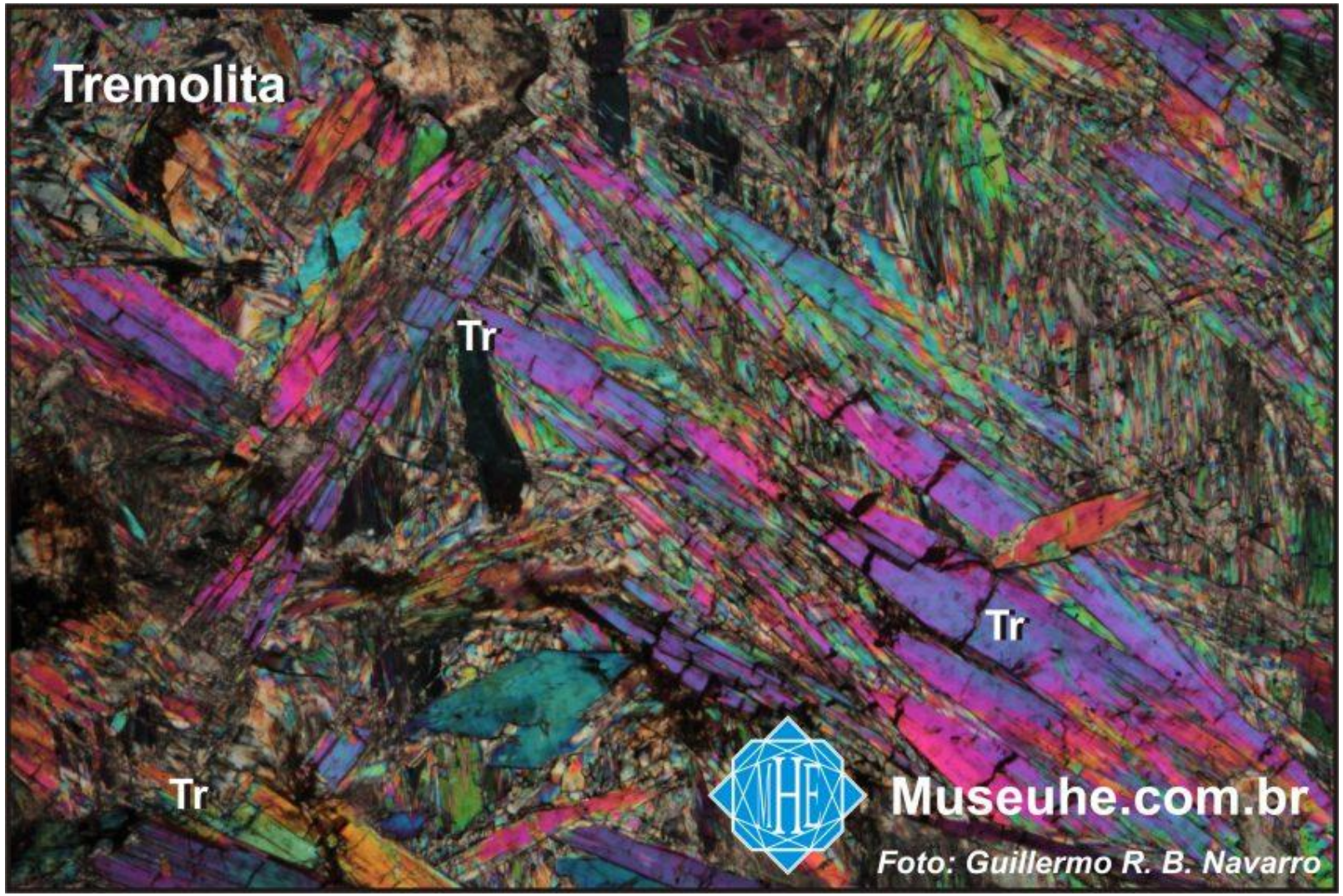


Figura 64: Cristais de Tremolita (Tr) **a NX.**

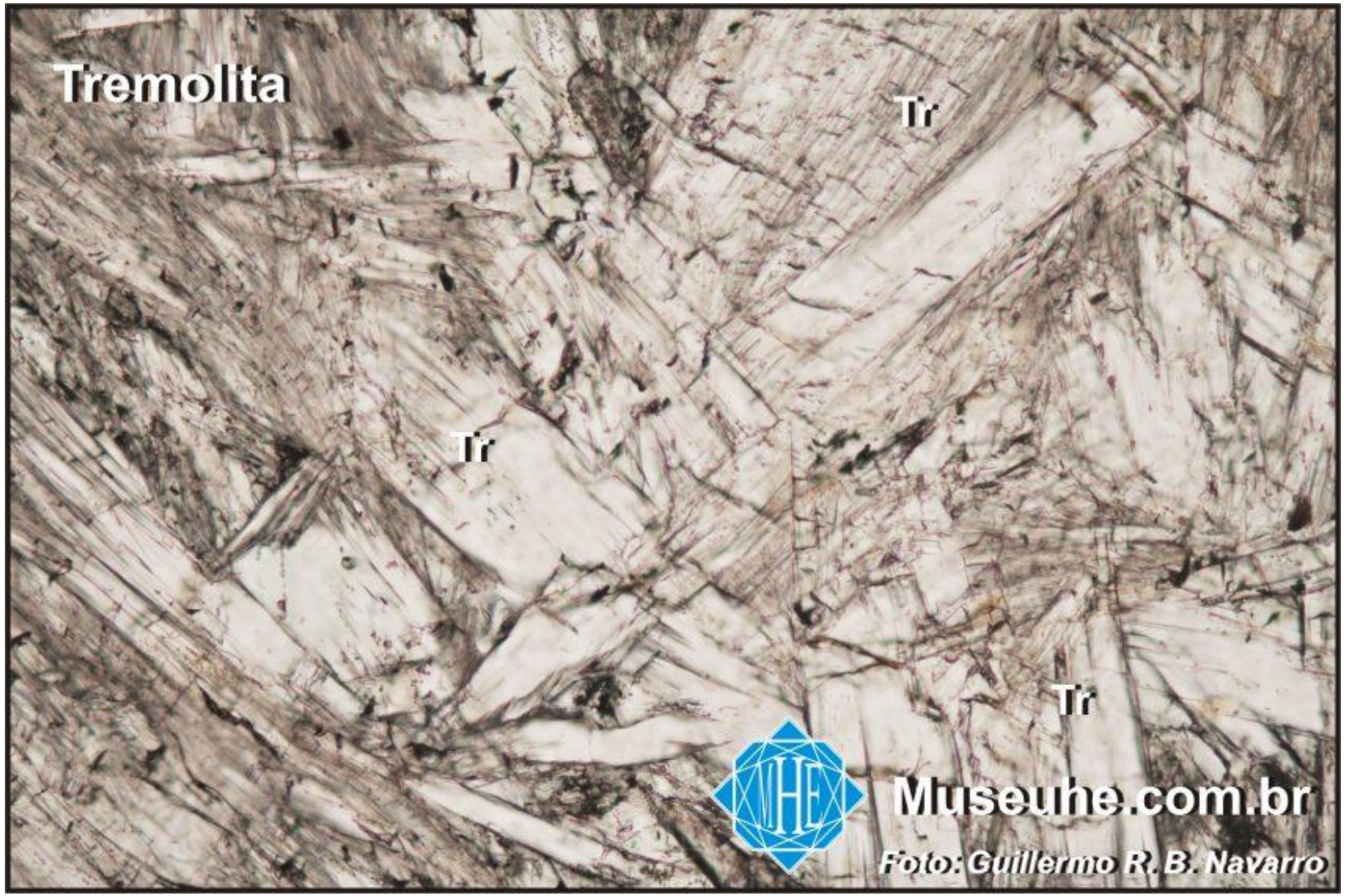


Figura 65: Cristais de Tremolita (Tr) **a NC.**

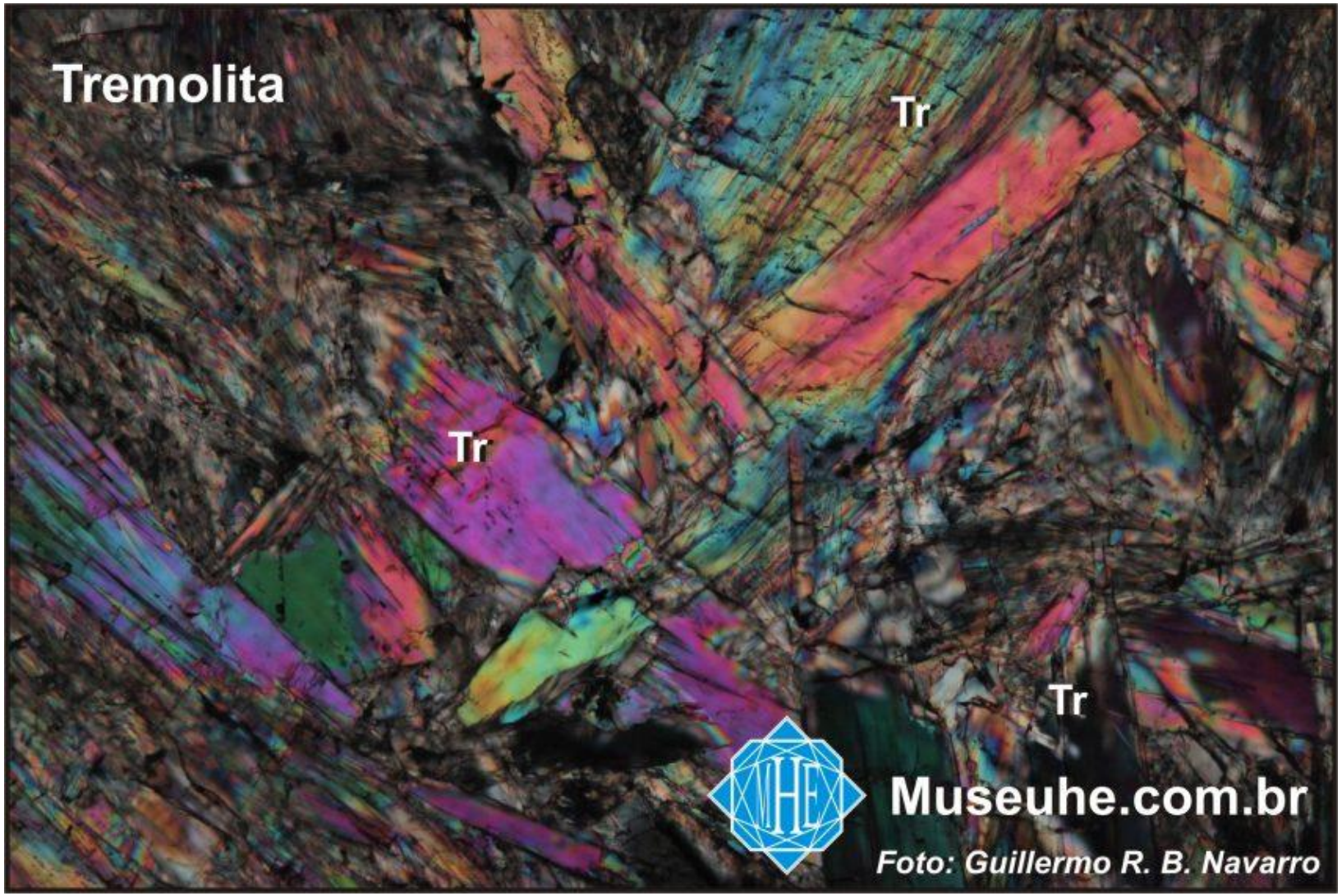


Figura 66: Cristais de Tremolita (Tr) **a NX.**

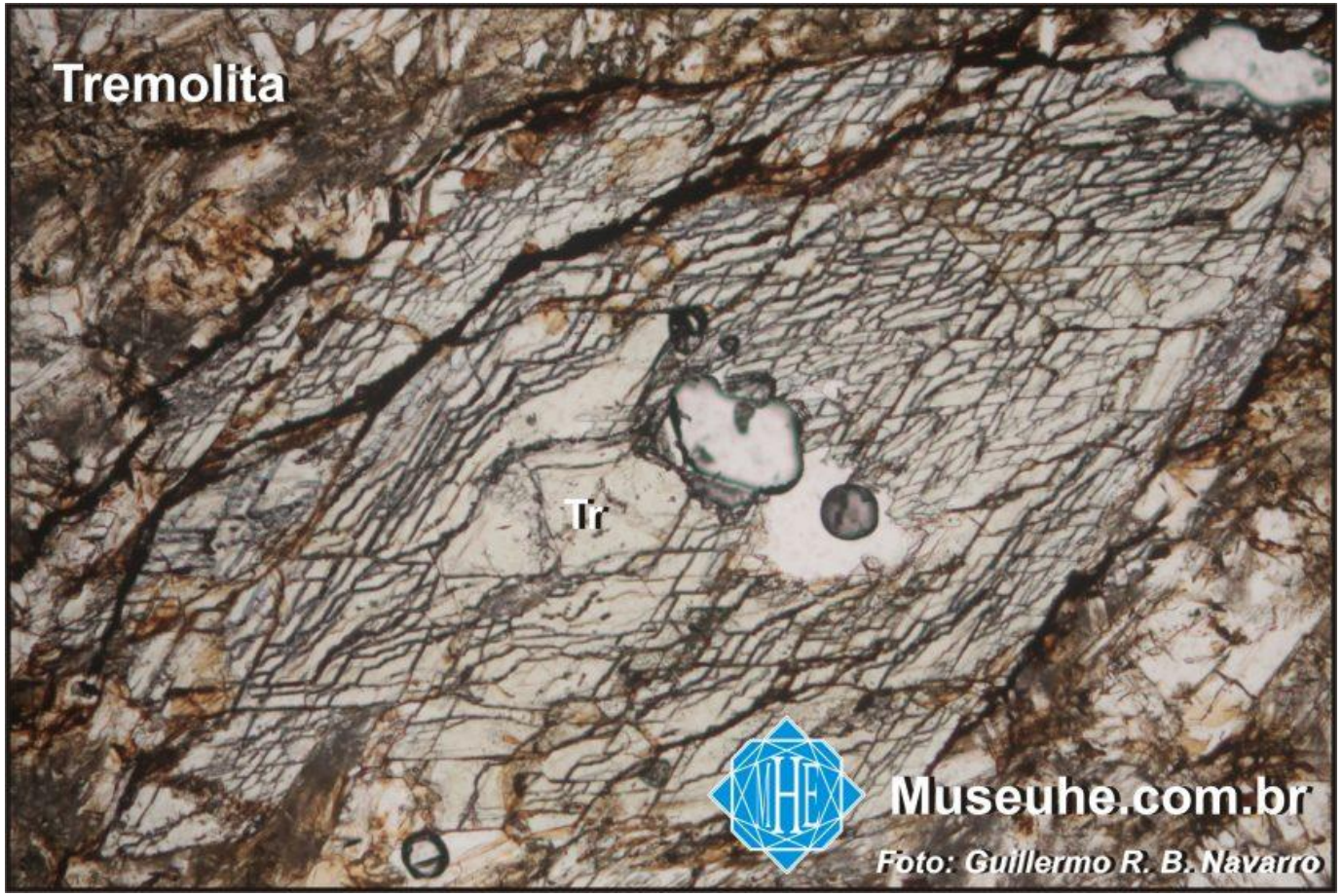


Figura 67: Cristal de Tremolita (Tr) **a NC.**

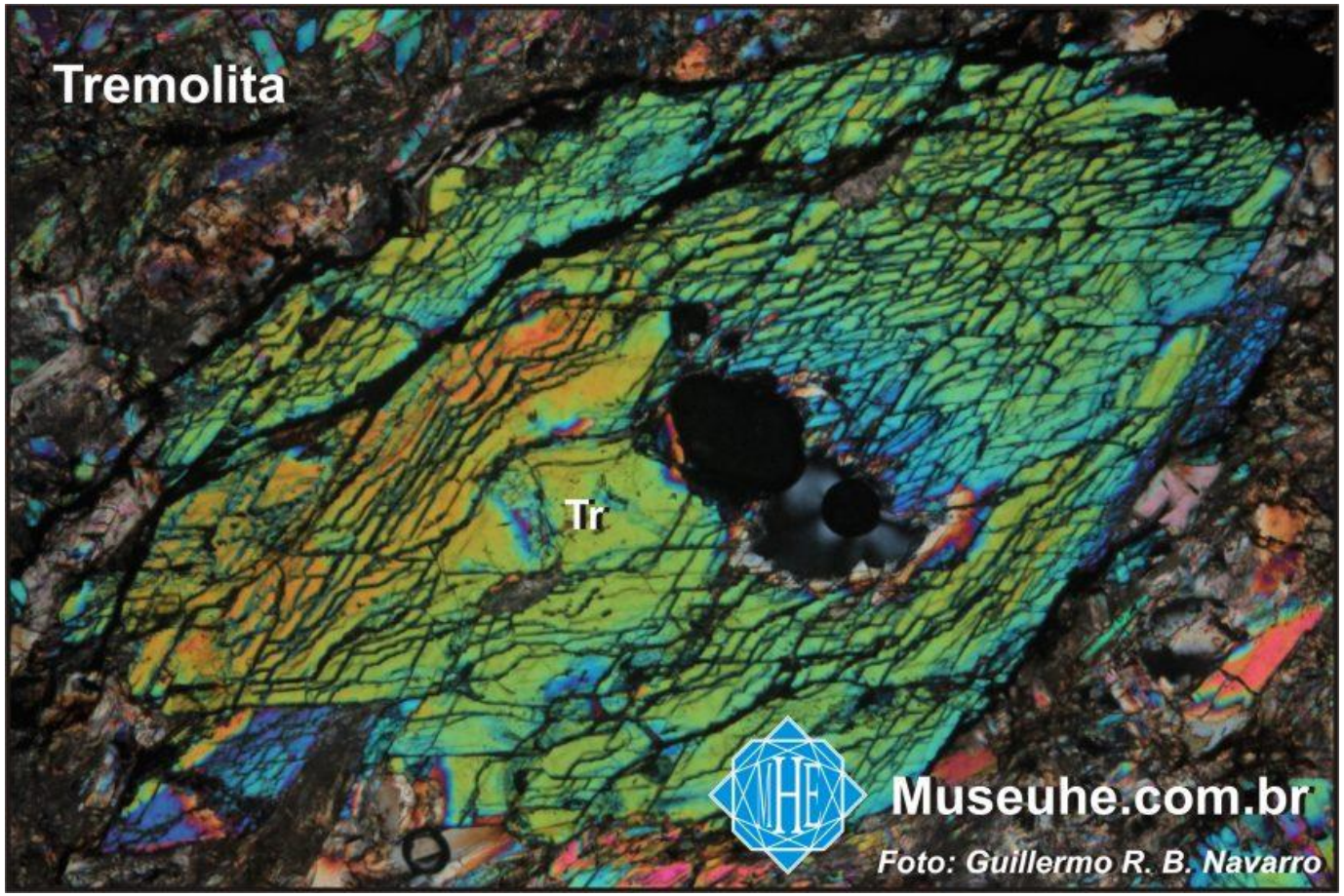


Figura 68: Cristal de Tremolita (Tr) **a NX.**

- **Diopsídio(Piroxênio):**

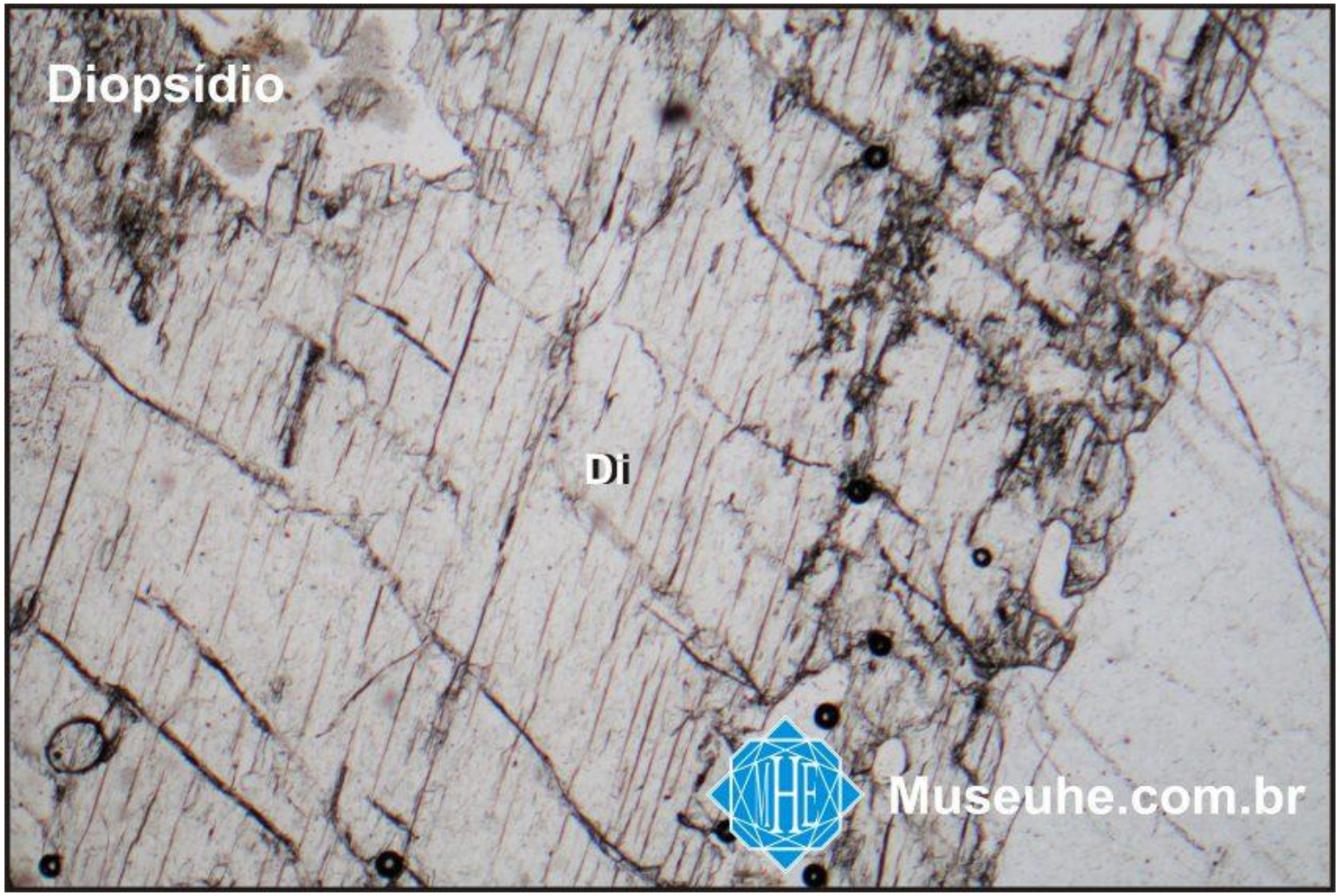


Figura 69: Cristal de Diopsídio (Di) a NC.

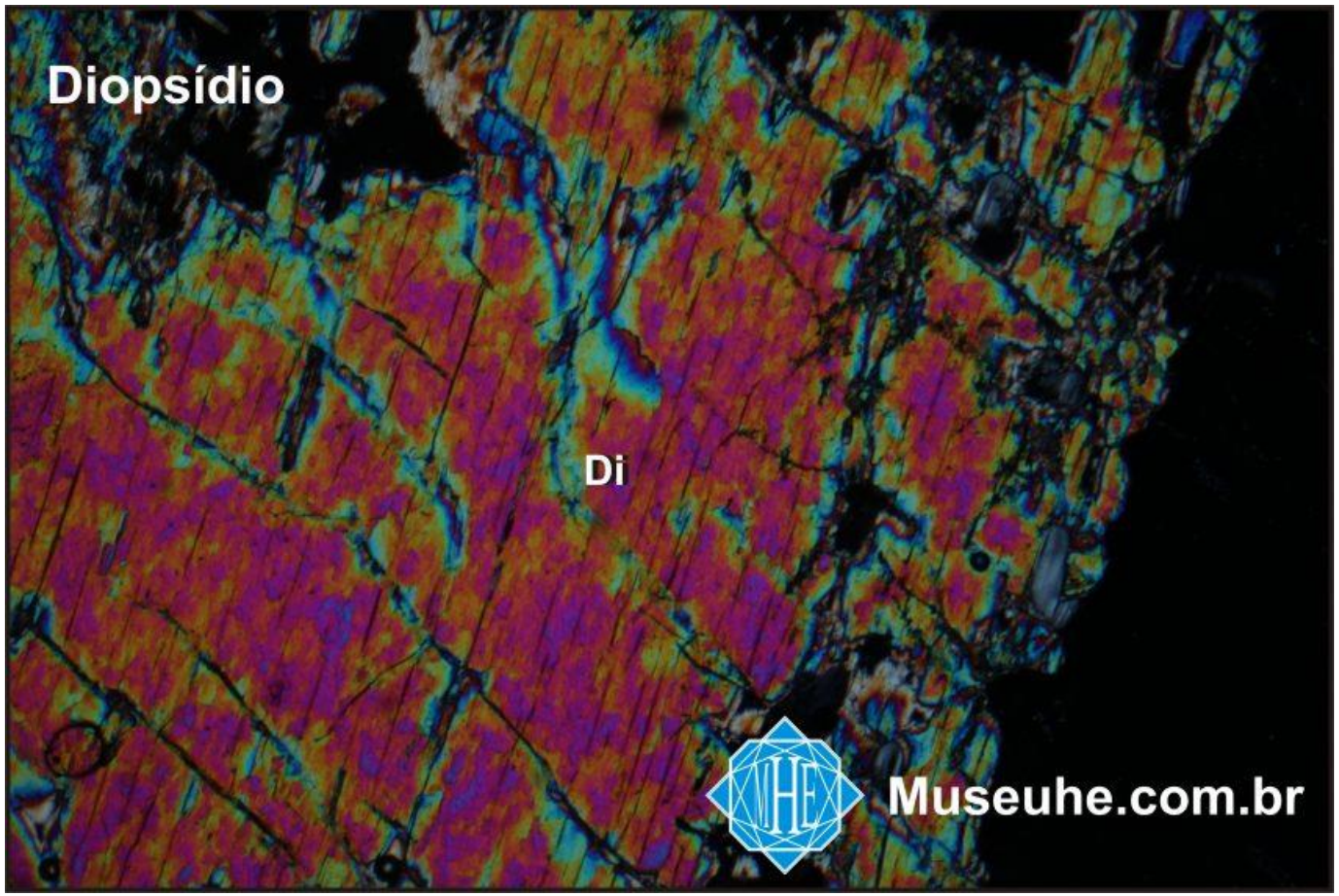


Figura 70: Cristal de Diopsídio (Di) a NX.

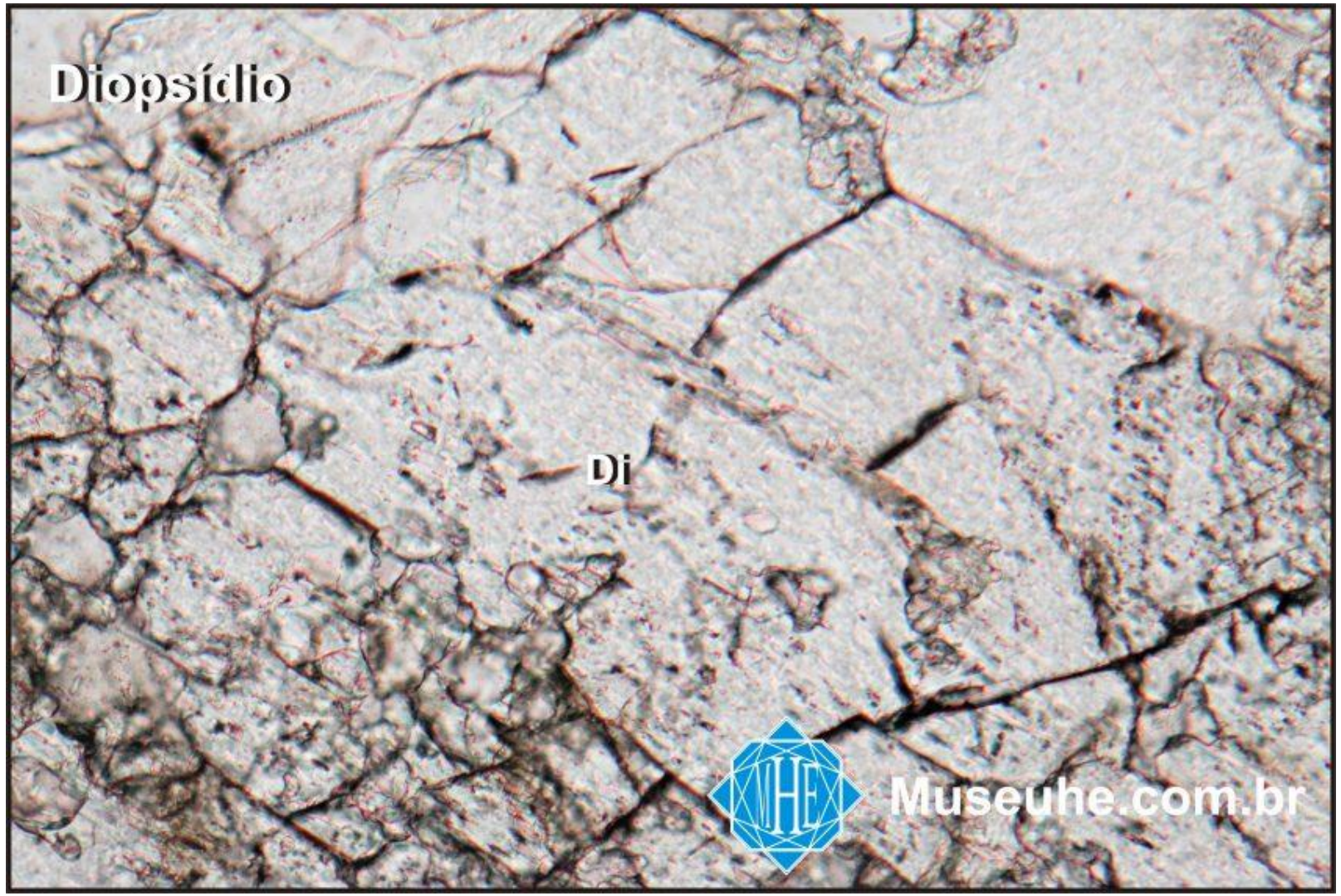


Figura 71: Cristal de Diopsídio (Di) a NC.

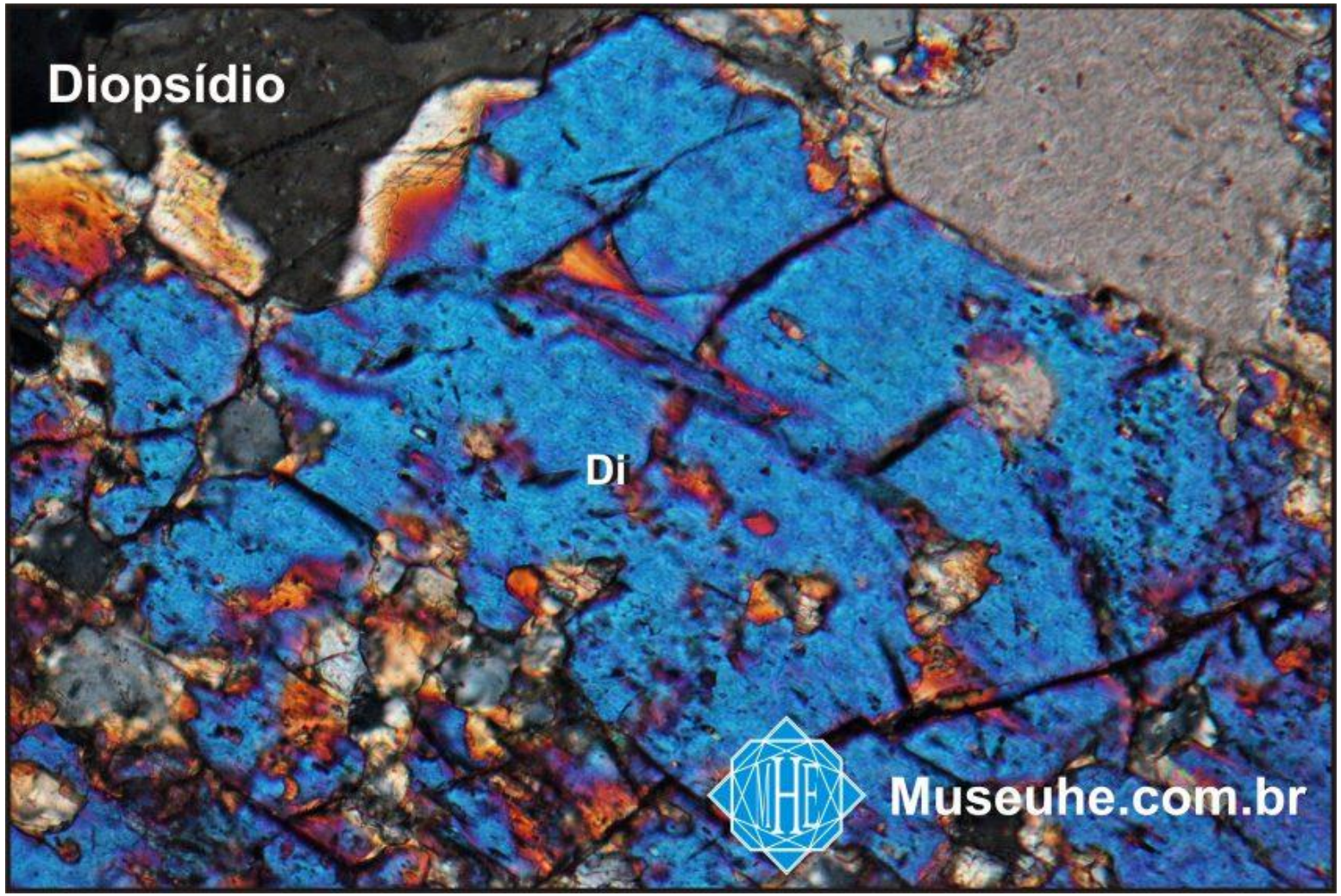


Figura 72: Cristal de Diopsídio (Di) a NX.

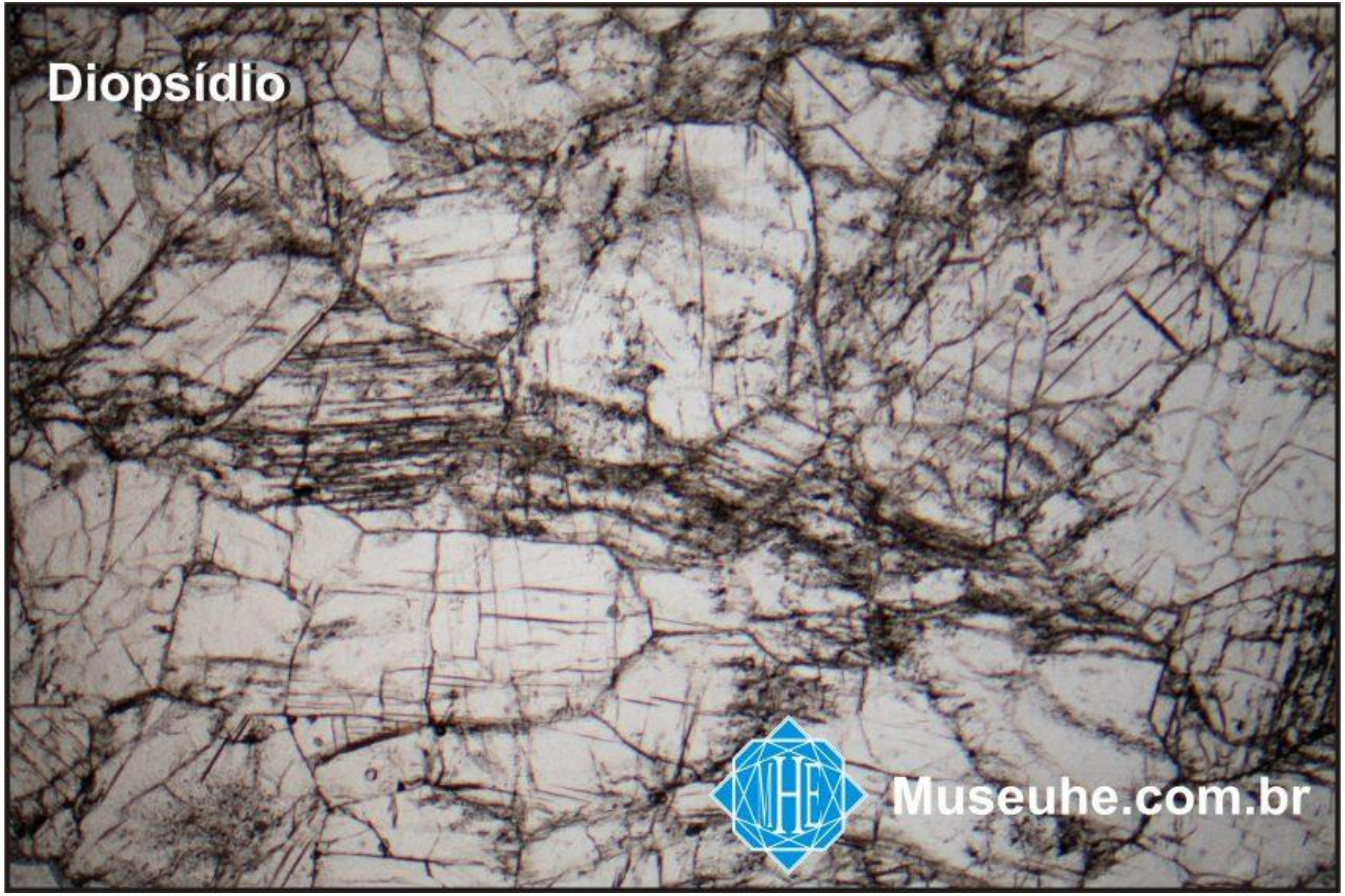


Figura 73: Cristal de Diopsídio (Di) a NC.

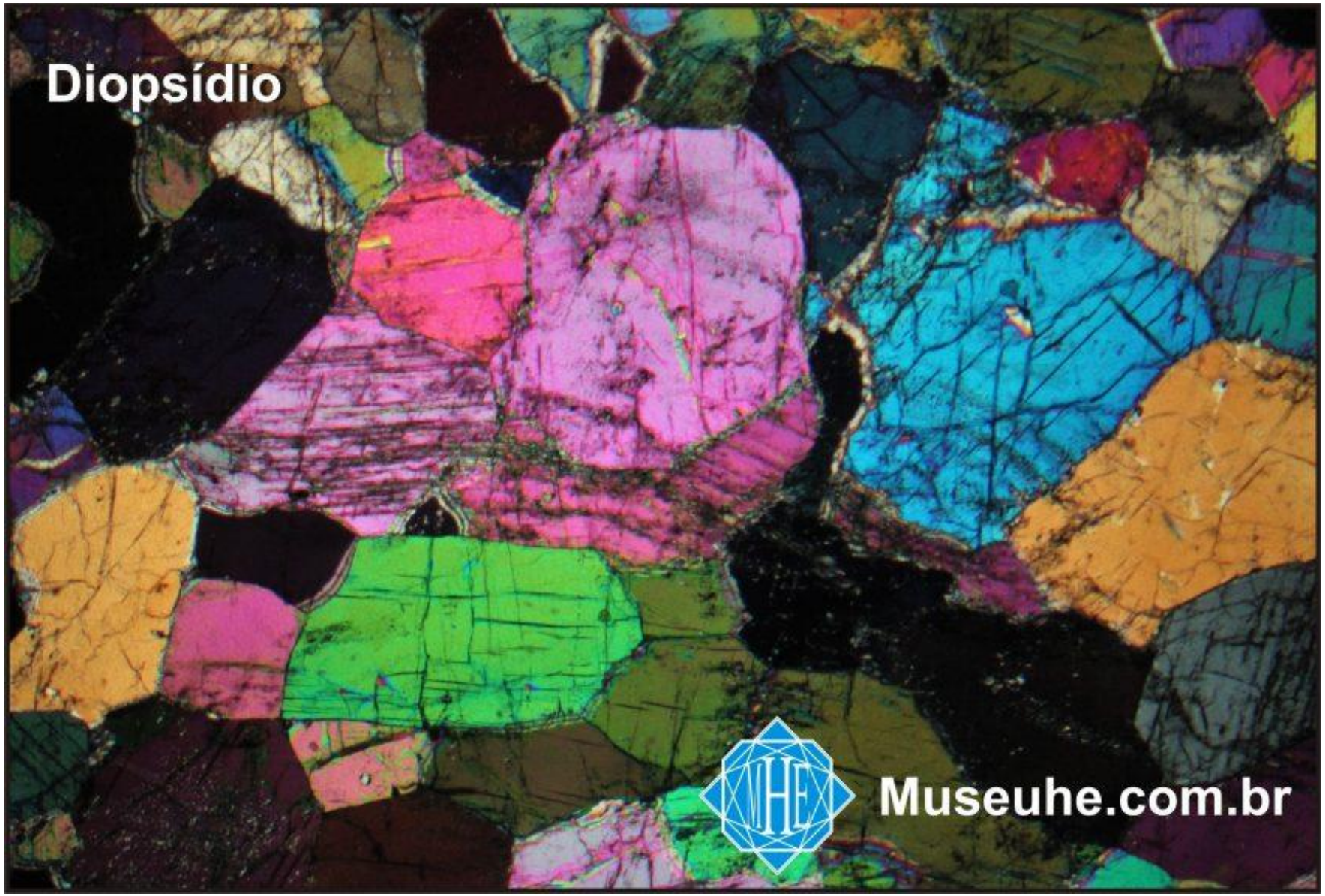


Figura 74: Cristal de Diopsídio (Di) a NX.

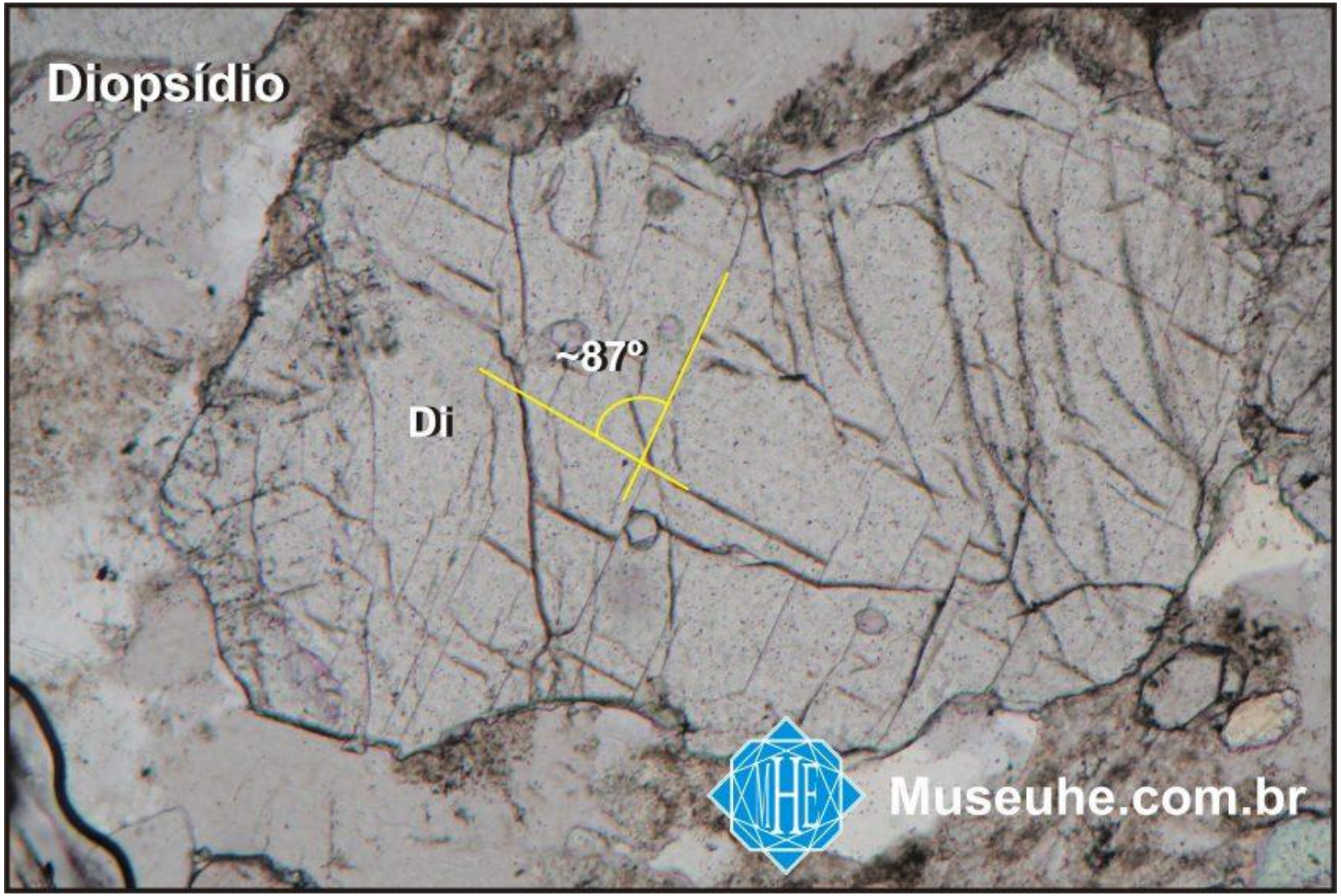


Figura 75: Cristal de Diopsídio (Di) a NC.

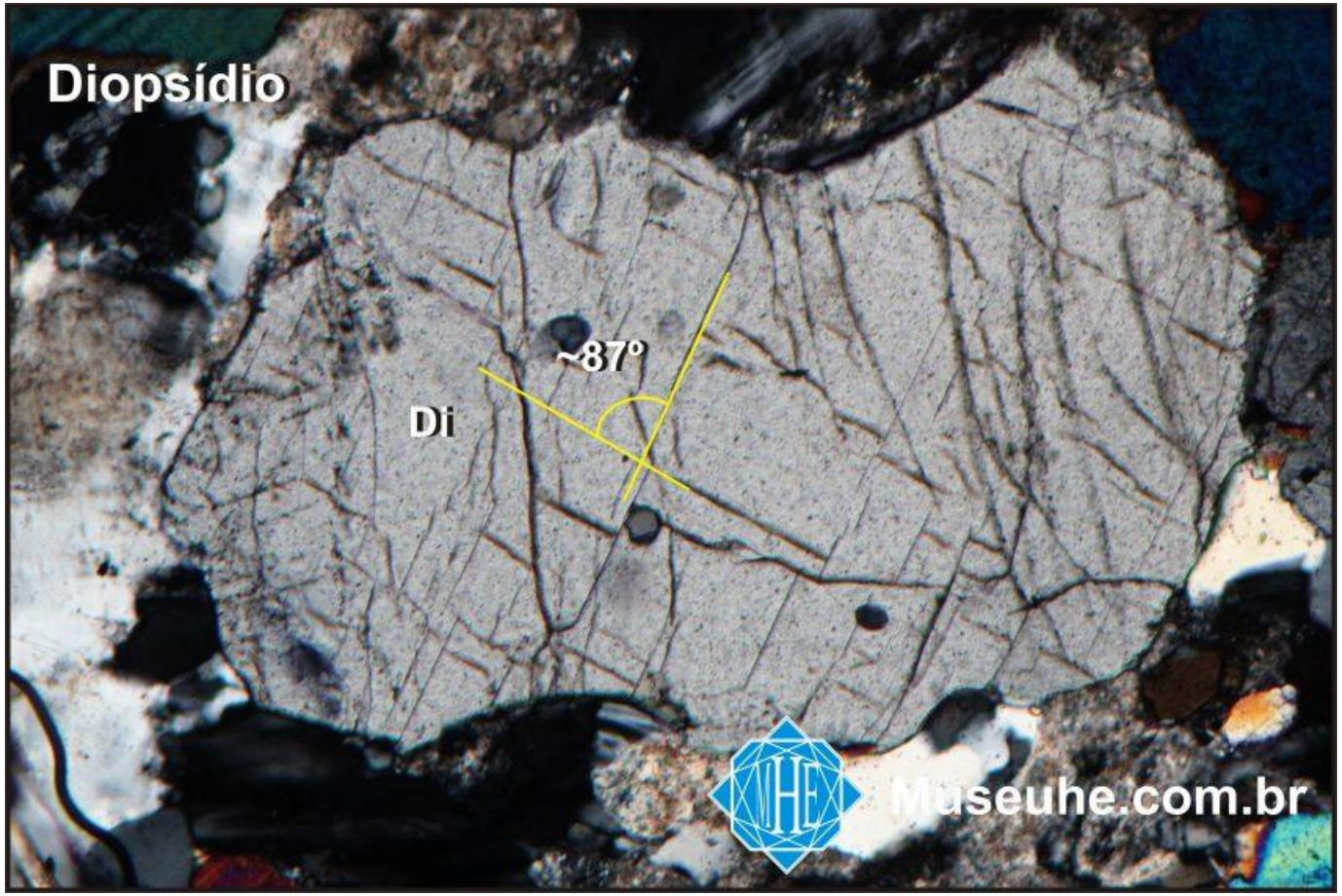


Figura 76: Cristal de Diopsídio (Di) a NX.

- **Augita(Piroxênio):**

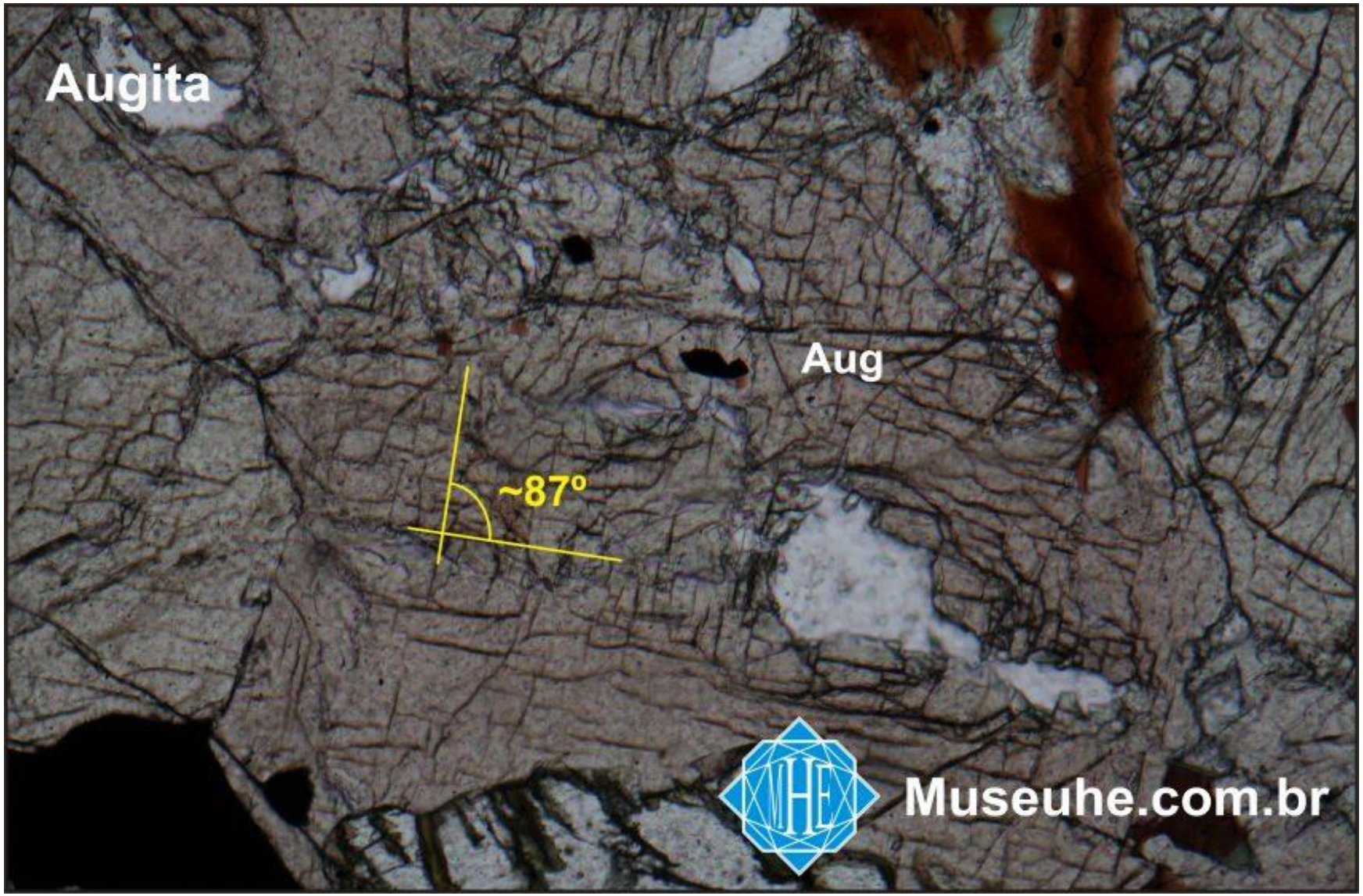


Figura 77: Cristal de Augita (Aug) a NC.

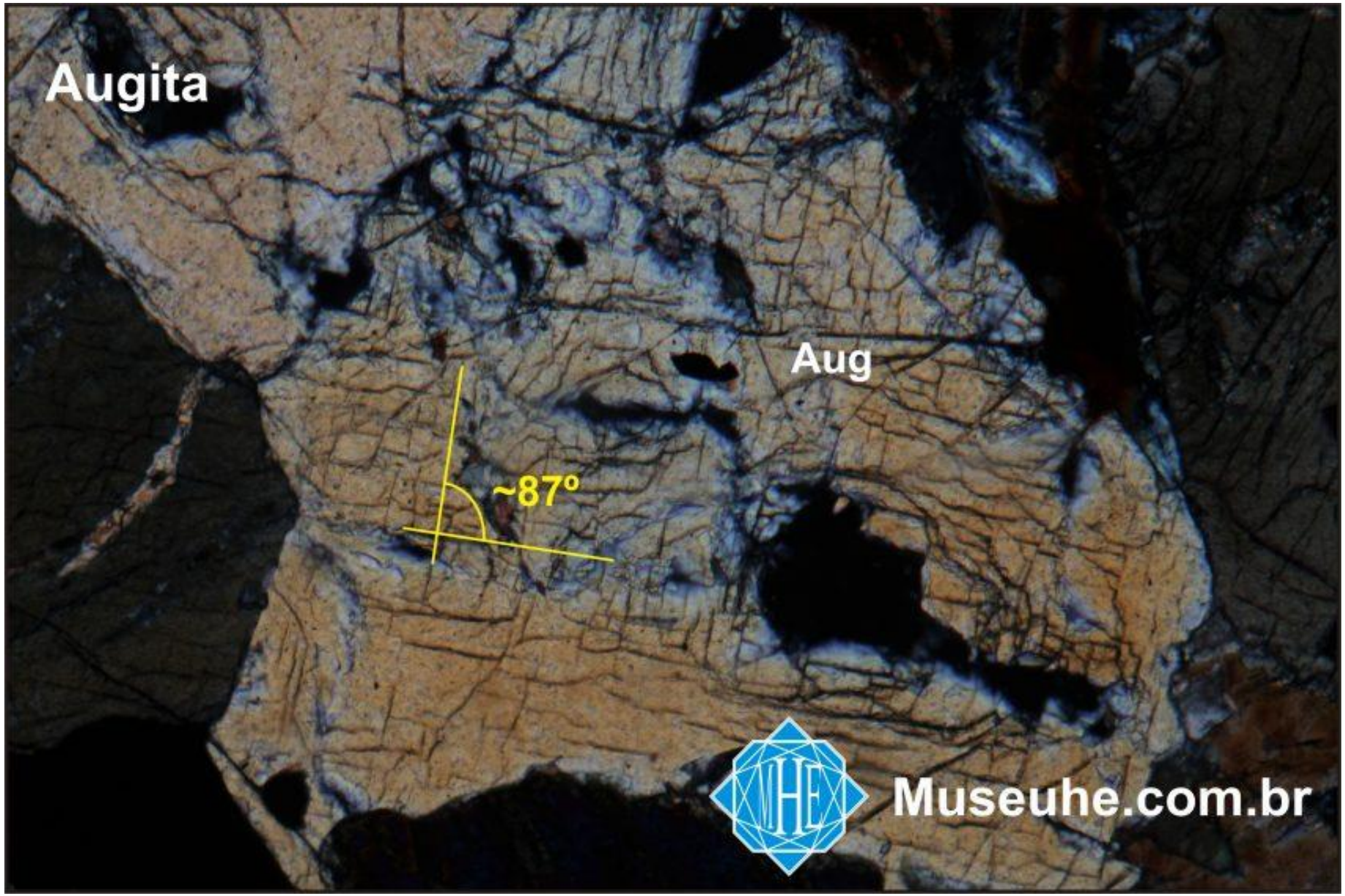


Figura 78: Cristal de Augita (Aug) a NX.

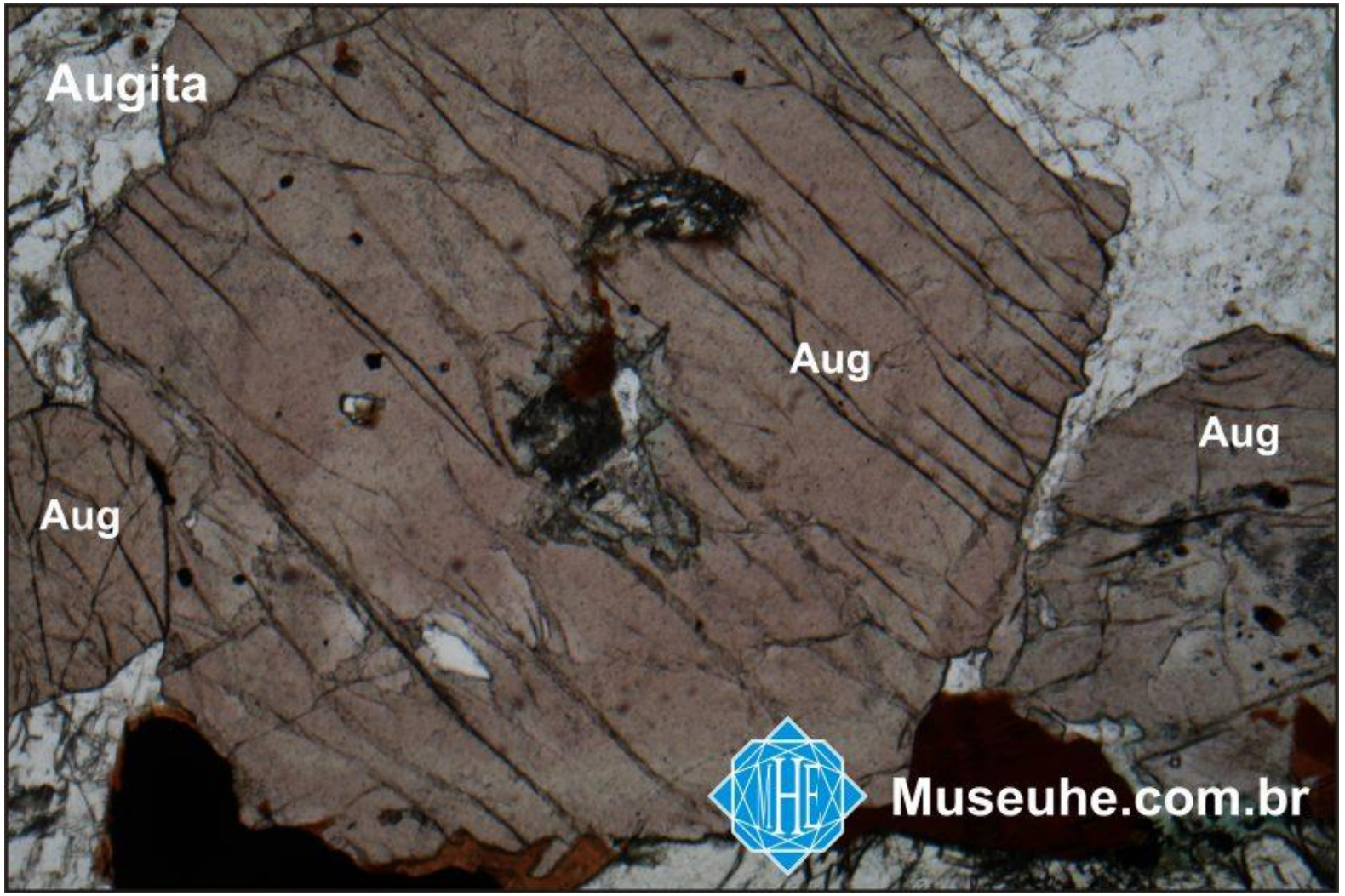


Figura 79: Cristal de Augita (Aug) a NC.

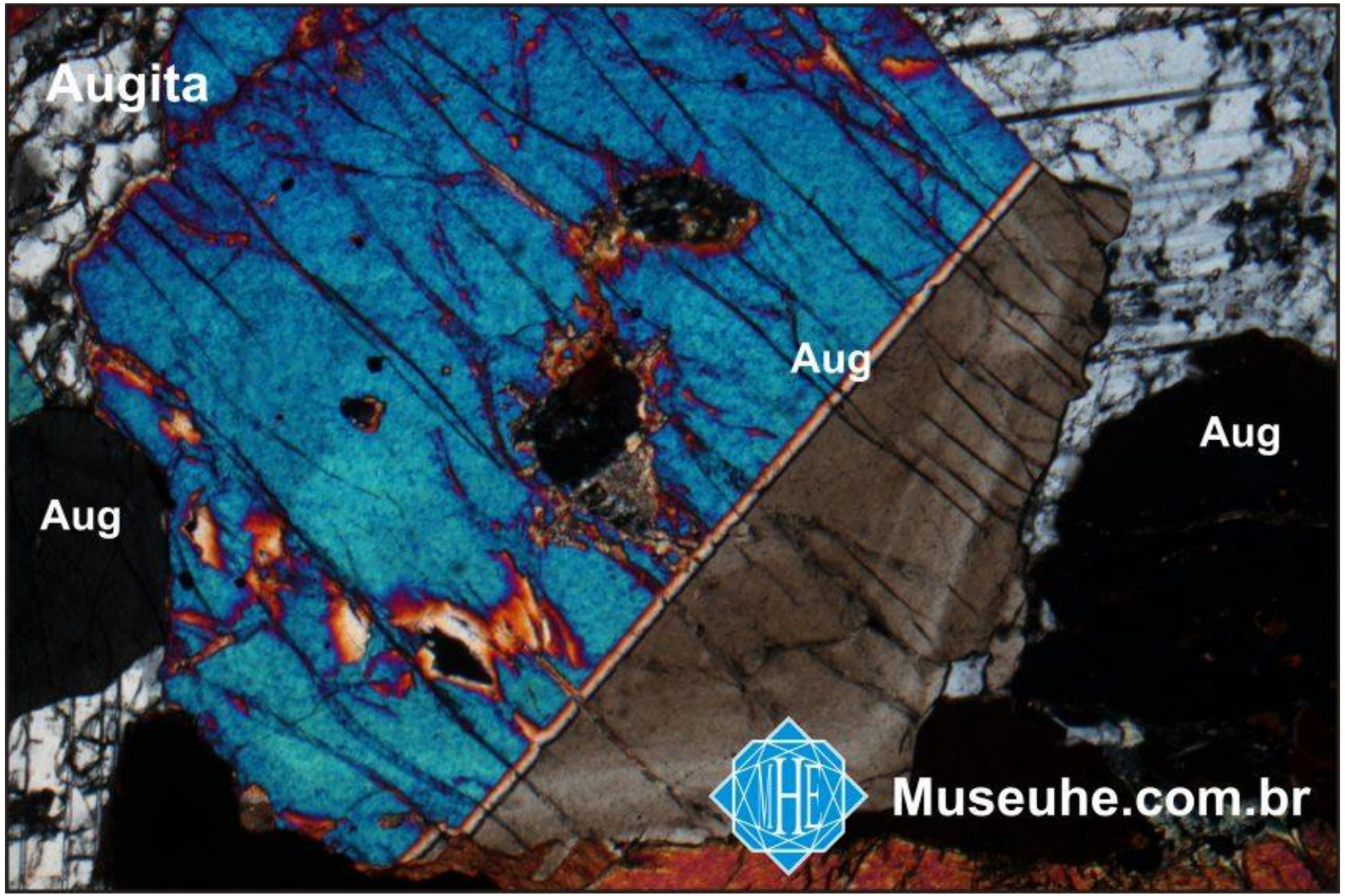


Figura 80: Cristal de Augita (Aug) a NX.

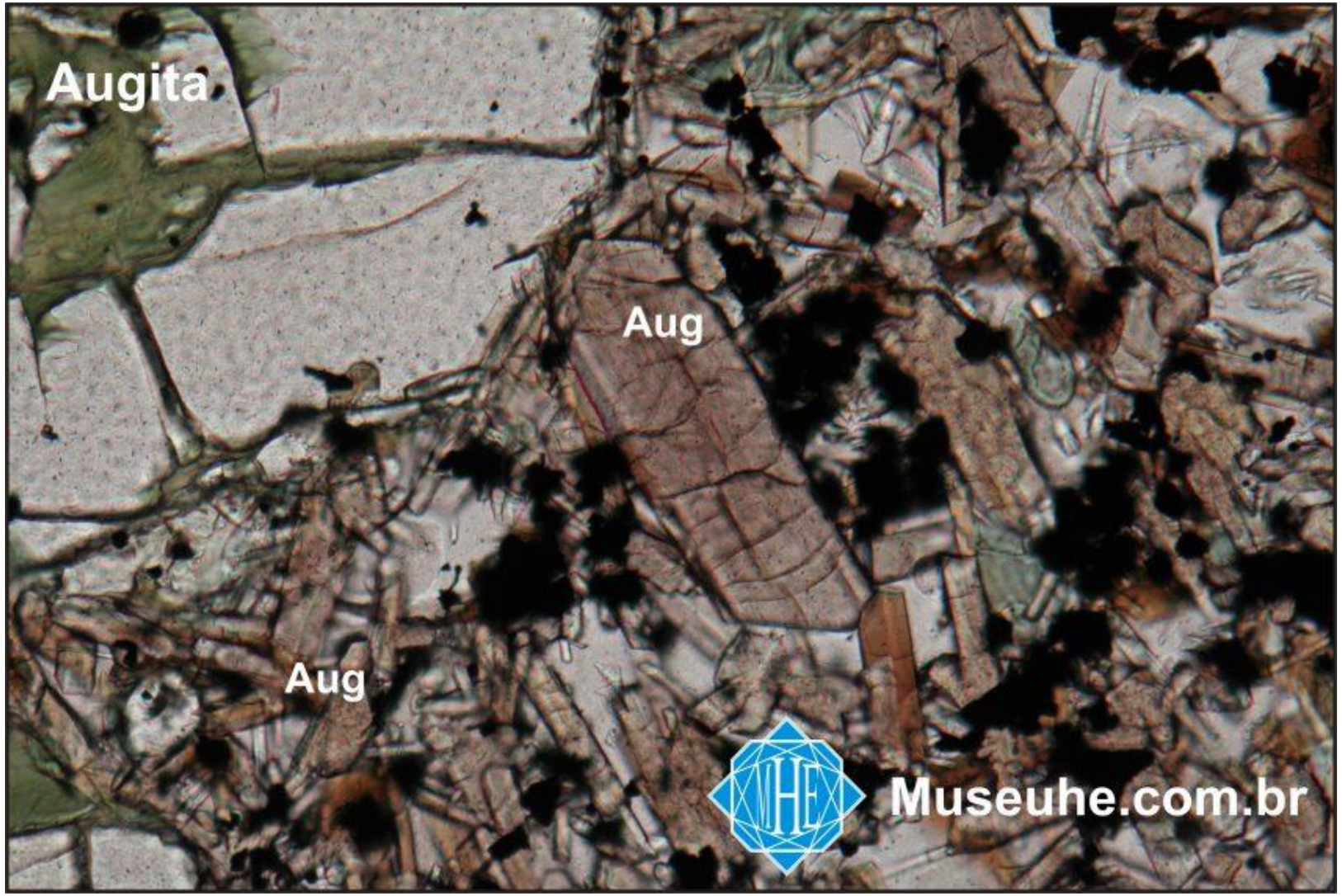


Figura 81: Cristal de Augita (Aug) a NC.

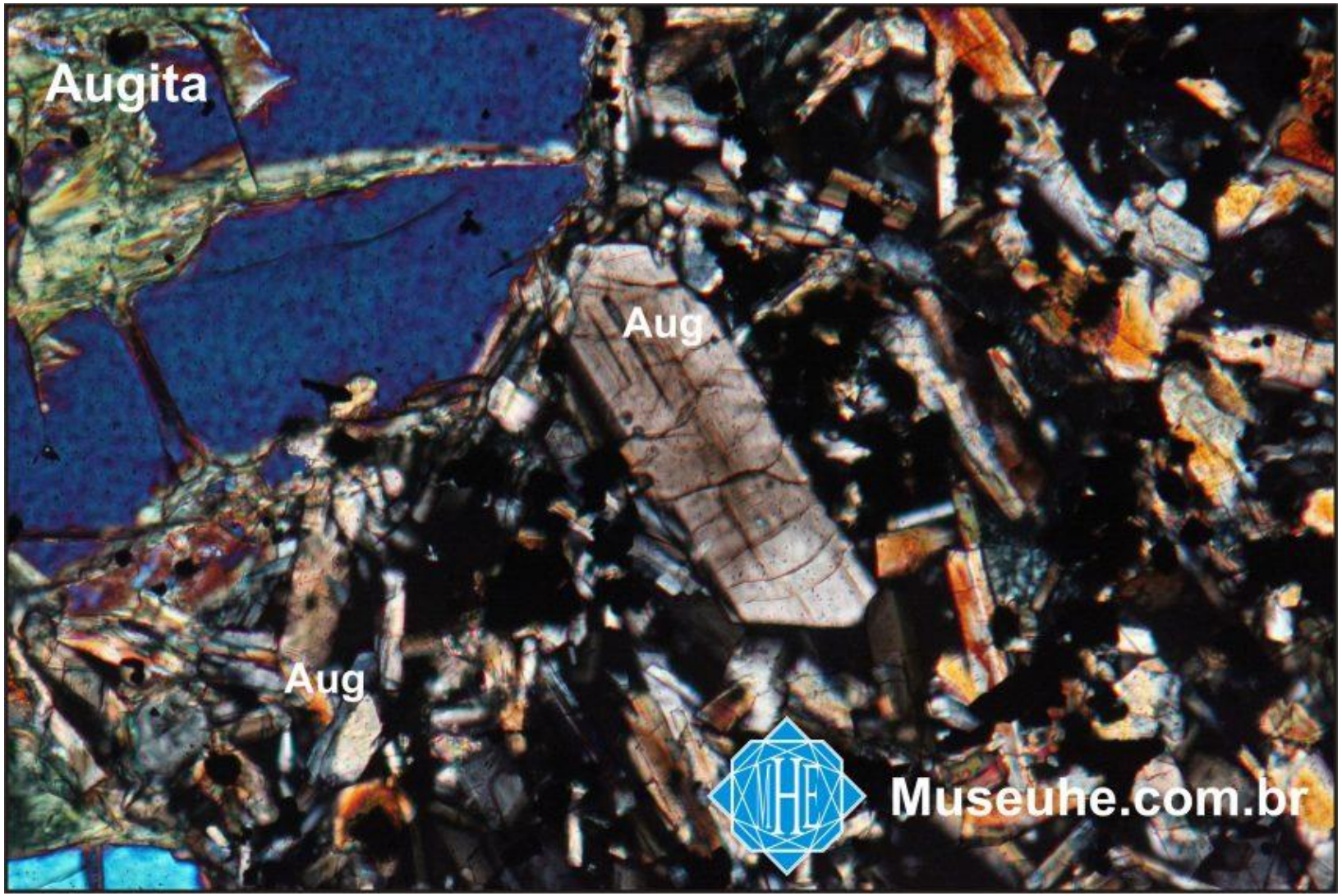


Figura 82: Cristal de Augita (Aug) a NX.

Aegirina(Piroxênio):

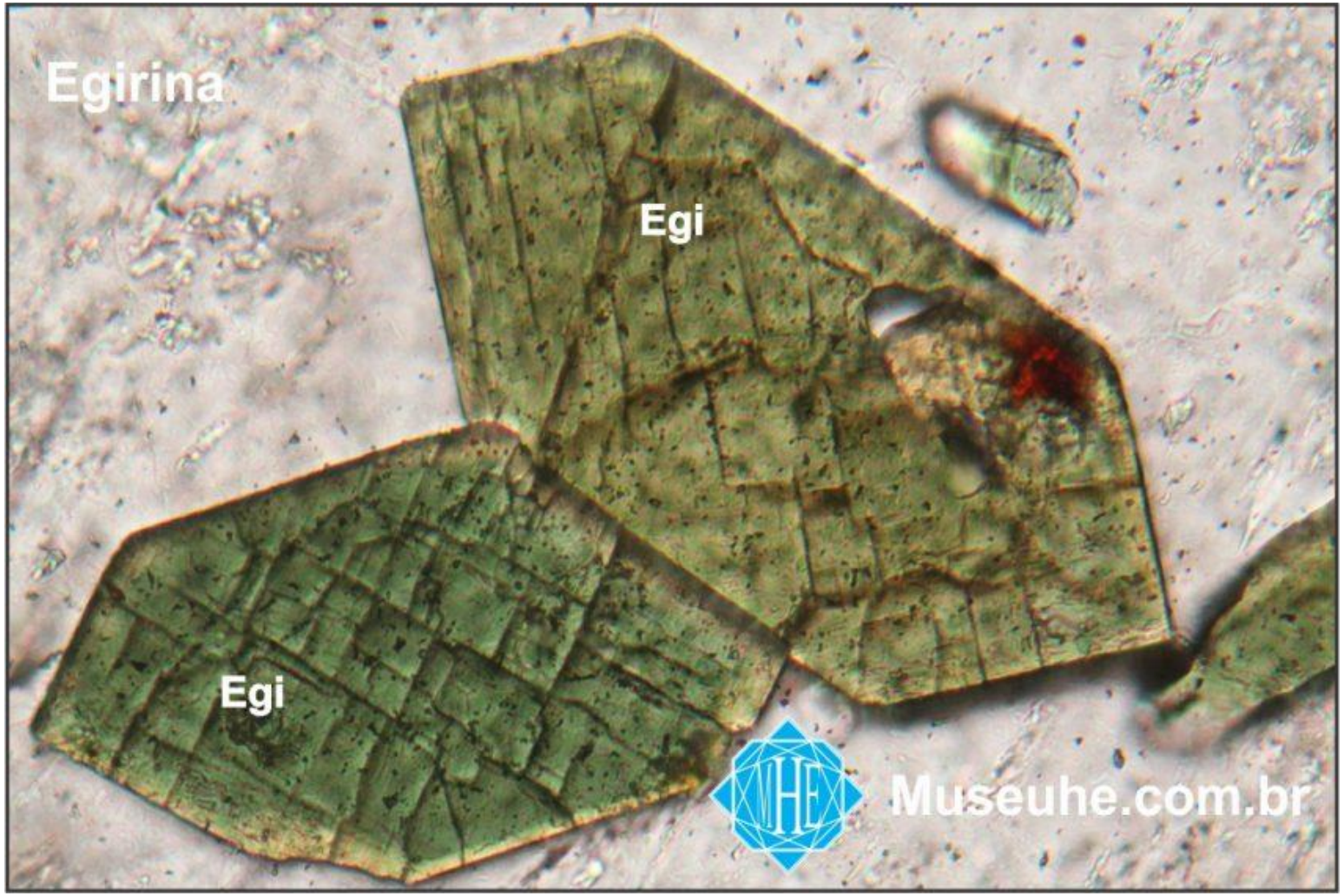


Figura 83: Cristais de Aegirina (Egi) a NC.

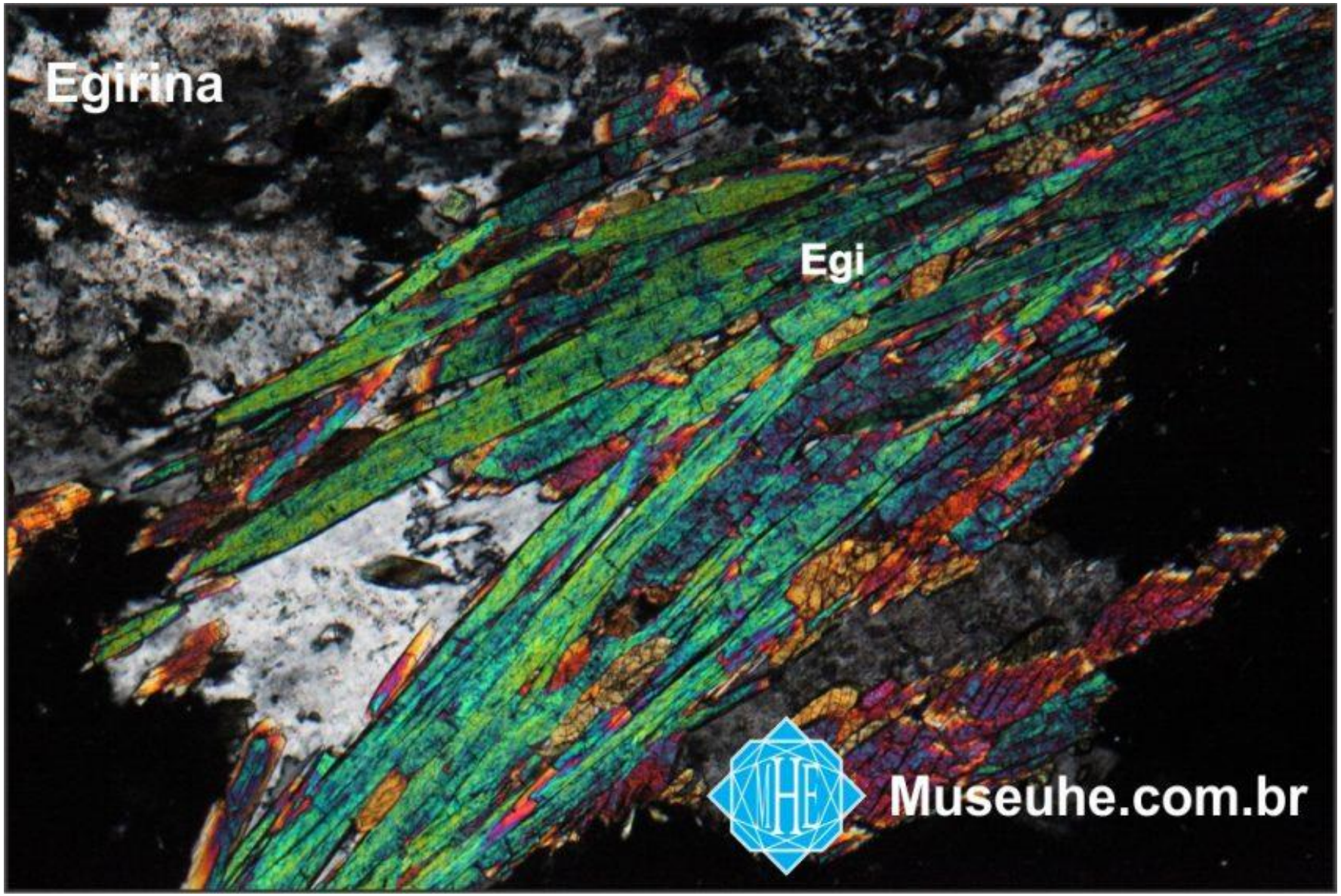


Figura 84: Cristais de Aegirina (Egi) a NX.

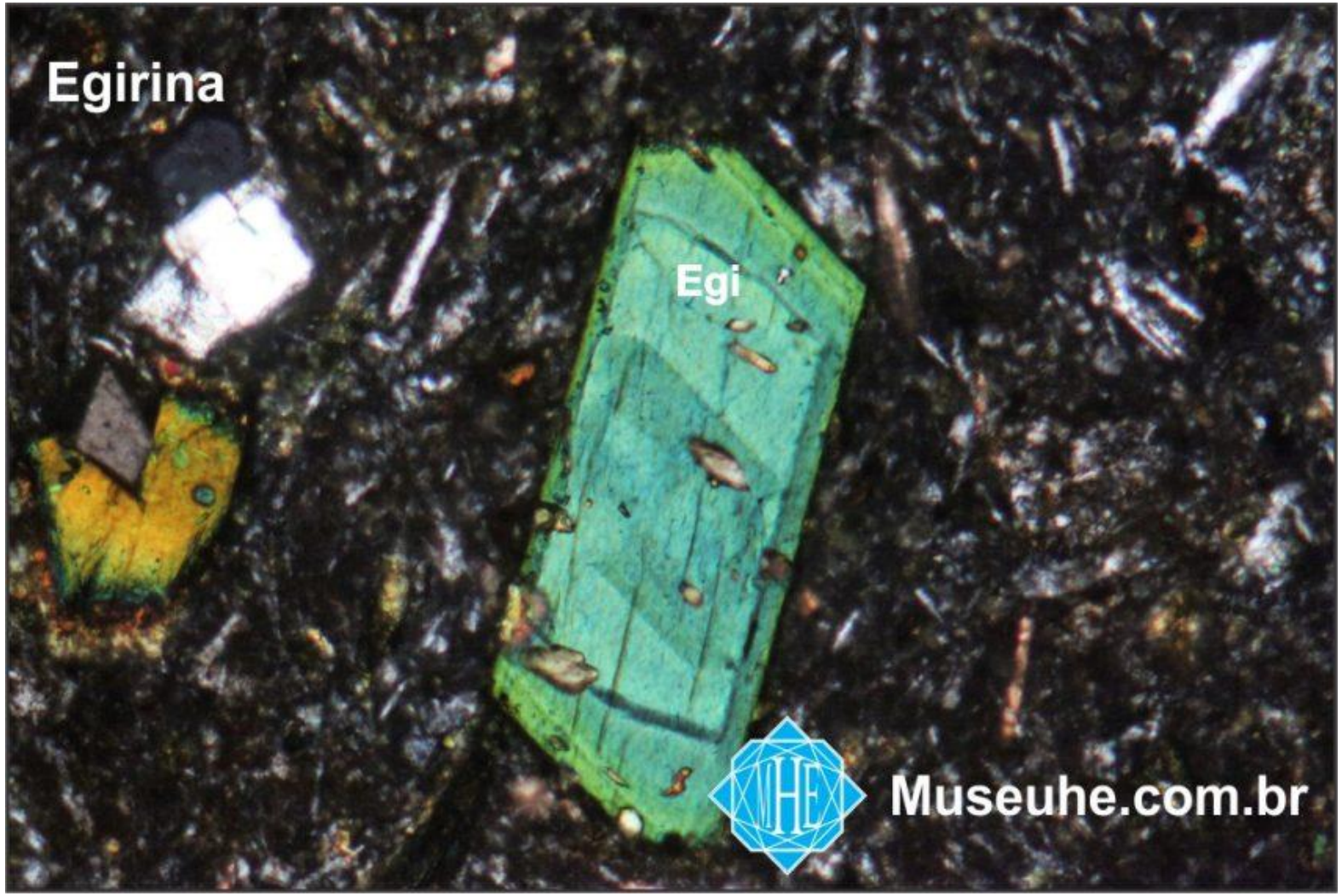


Figura 85: Cristais de Aegirina (Egi) a NX.

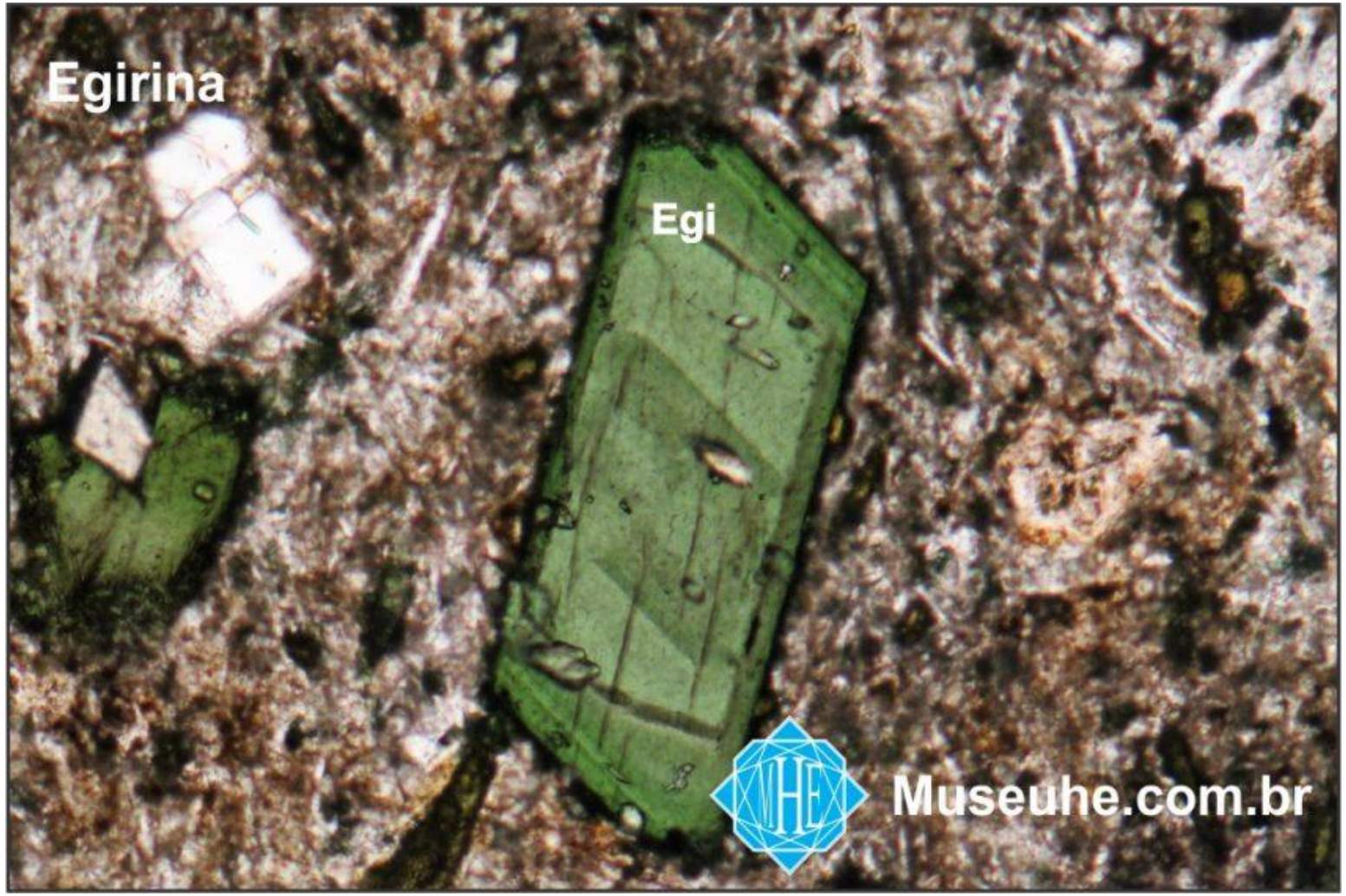


Figura 86: Cristal de Aegirina (Egi) a NC.

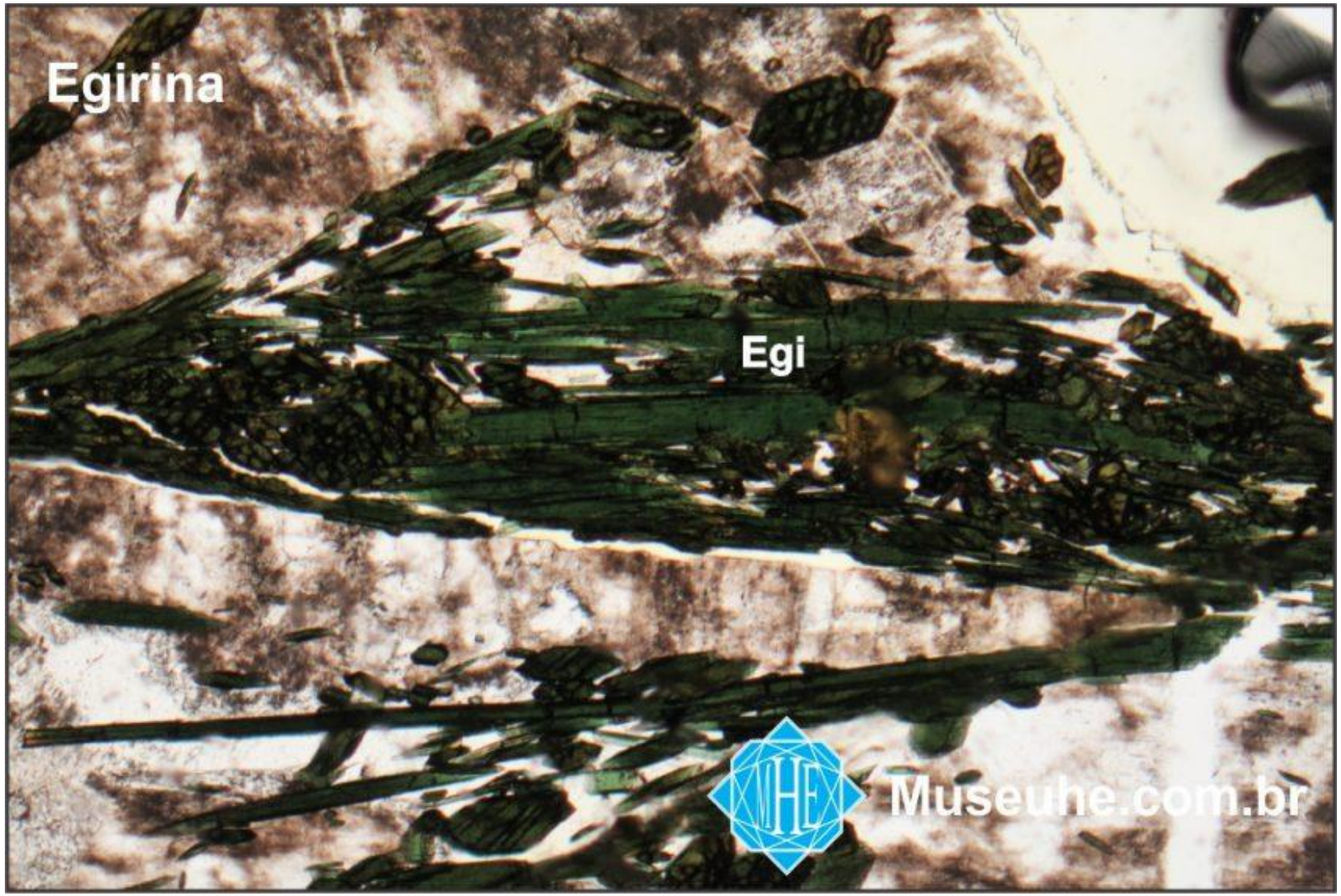


Figura 87: Cristal de Aegirina (Egi) a NC.

- **Silimanita:**

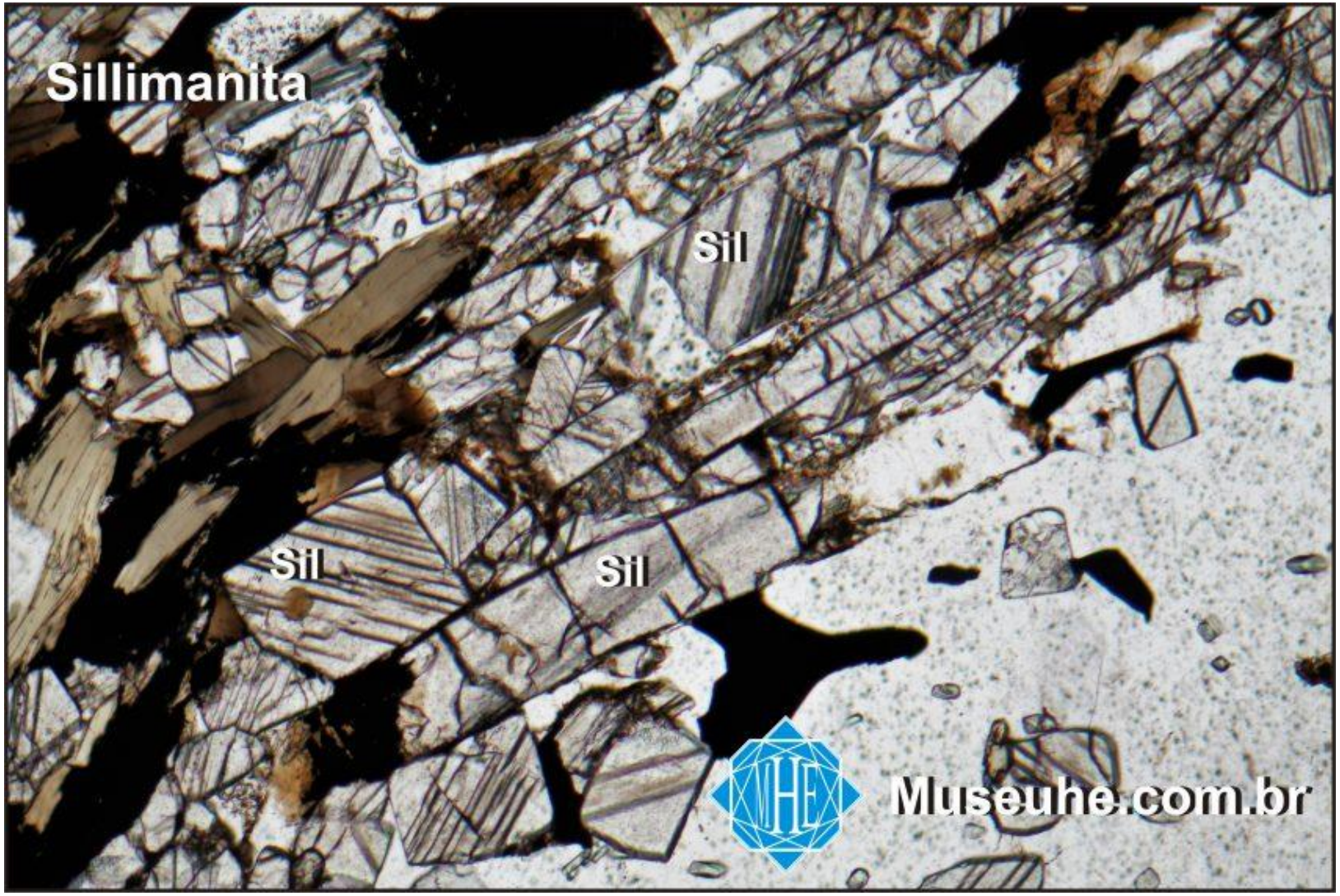


Figura 88: Cristais de Silimanita (Sil) a NC.

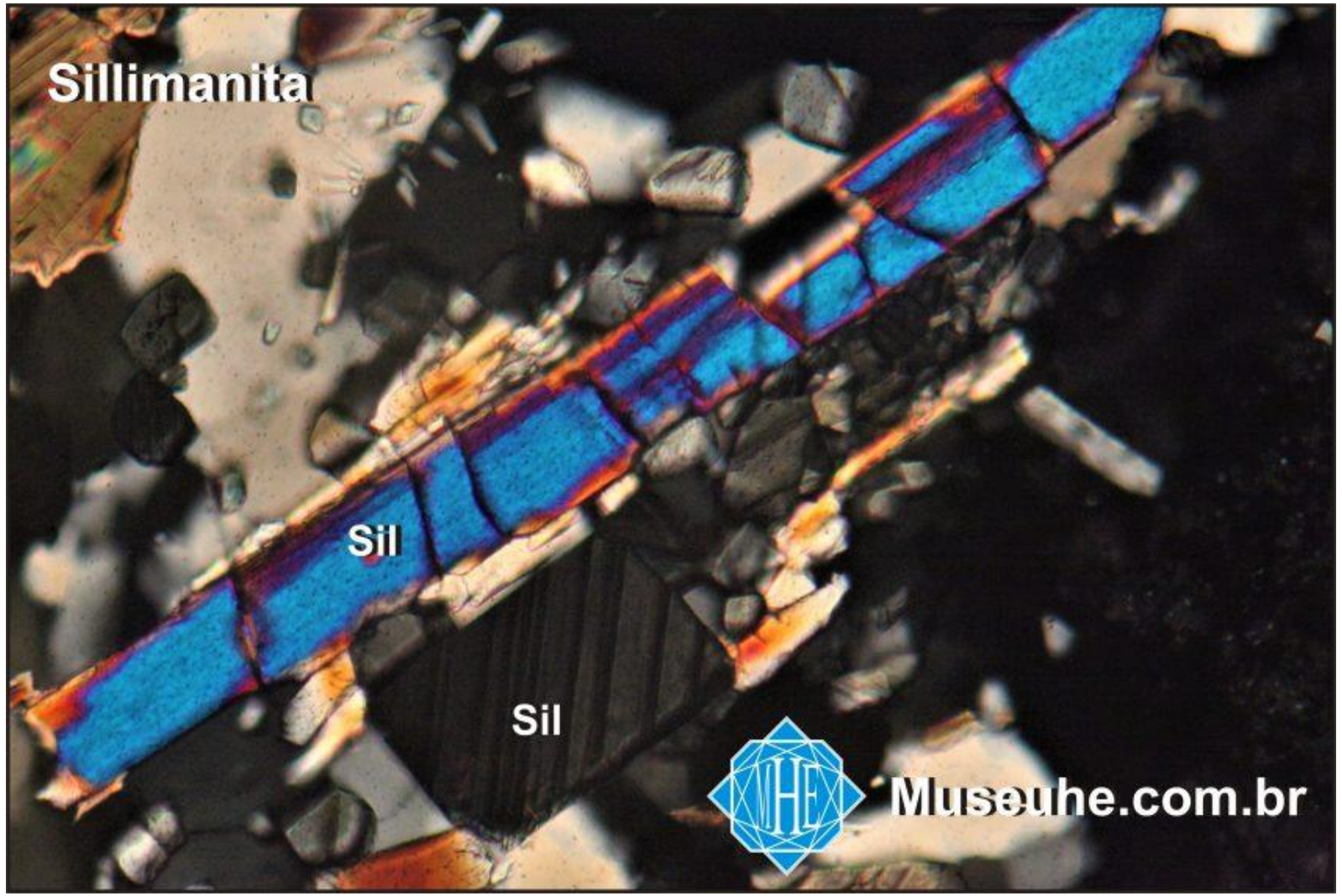


Figura 89: Cristais de Silimanita (Sil) a NX.

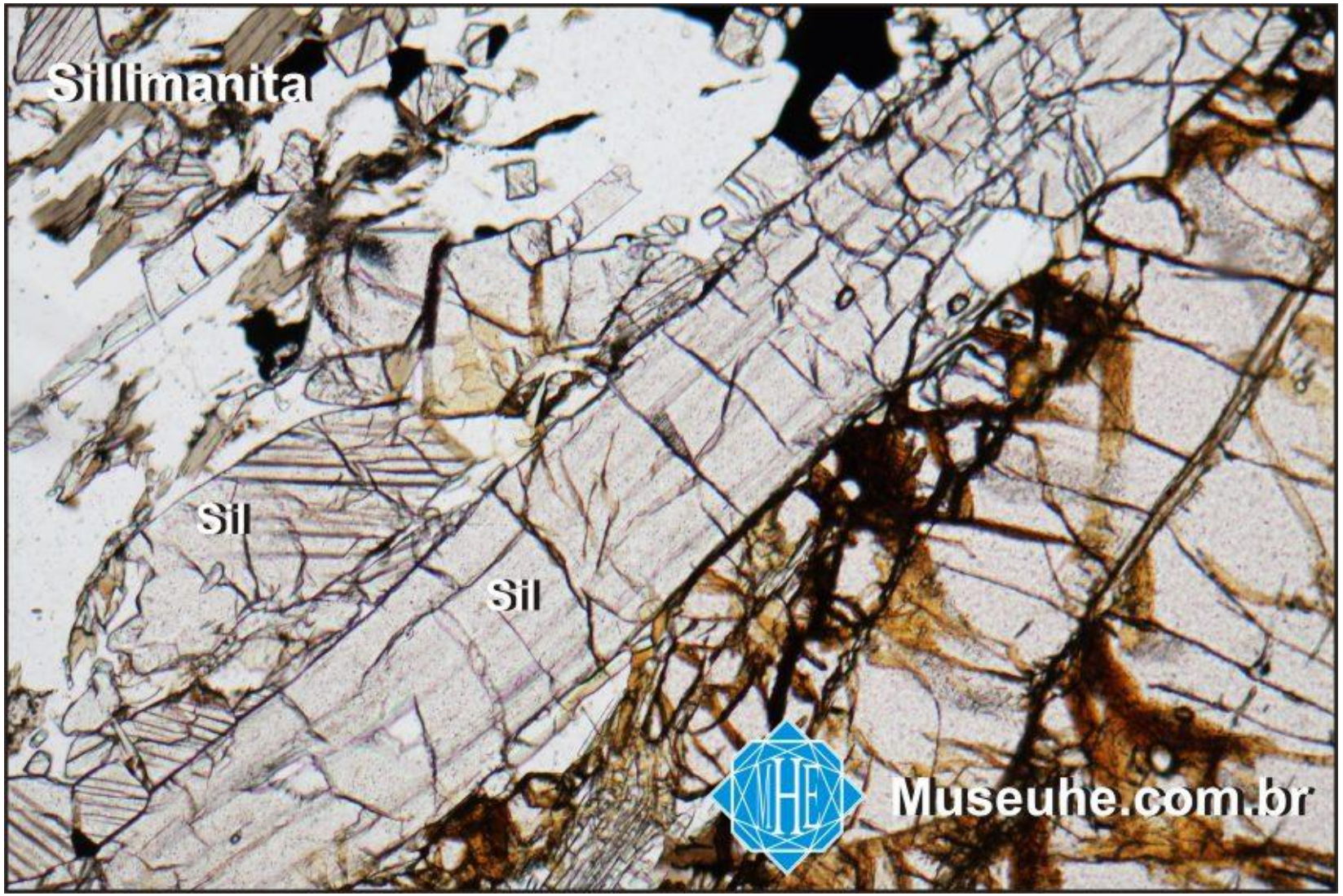


Figura 90: Cristais de Silimanita (Sil) a NC.

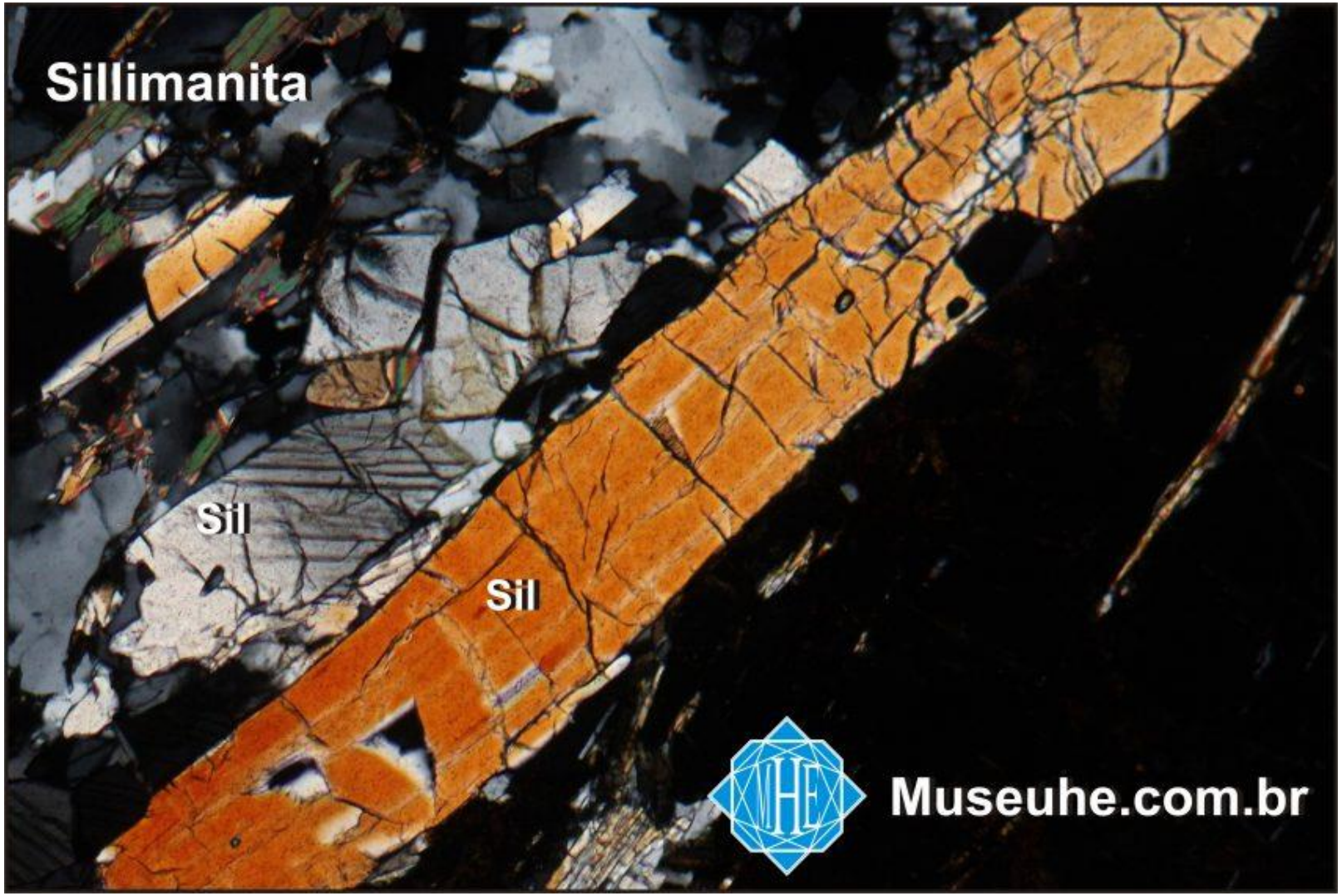


Figura 91: Cristais de Silimanita (Sil) a NX.

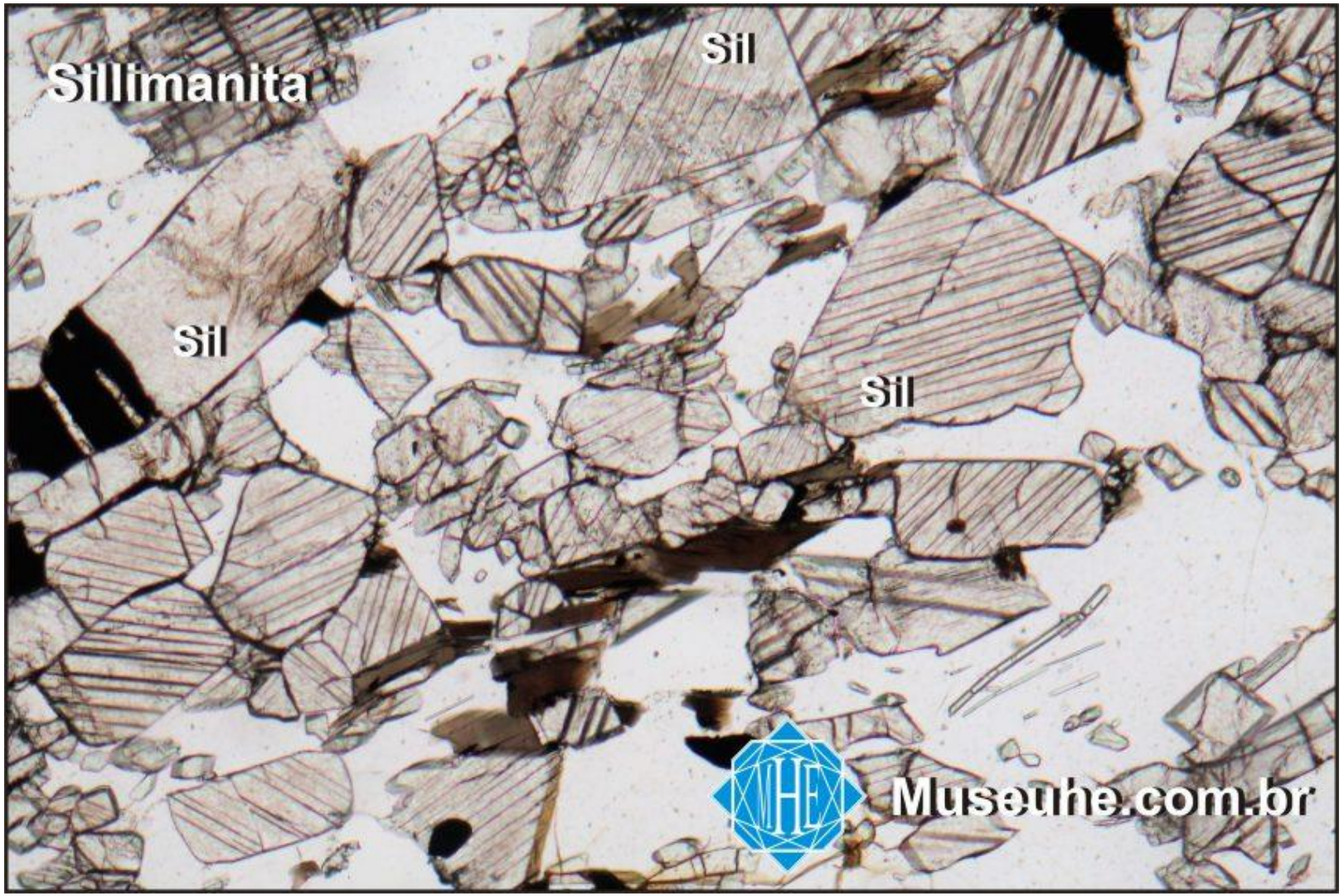


Figura 92: Cristais de Silimanita (Sil) a NC.

- **Glaucofânio:**

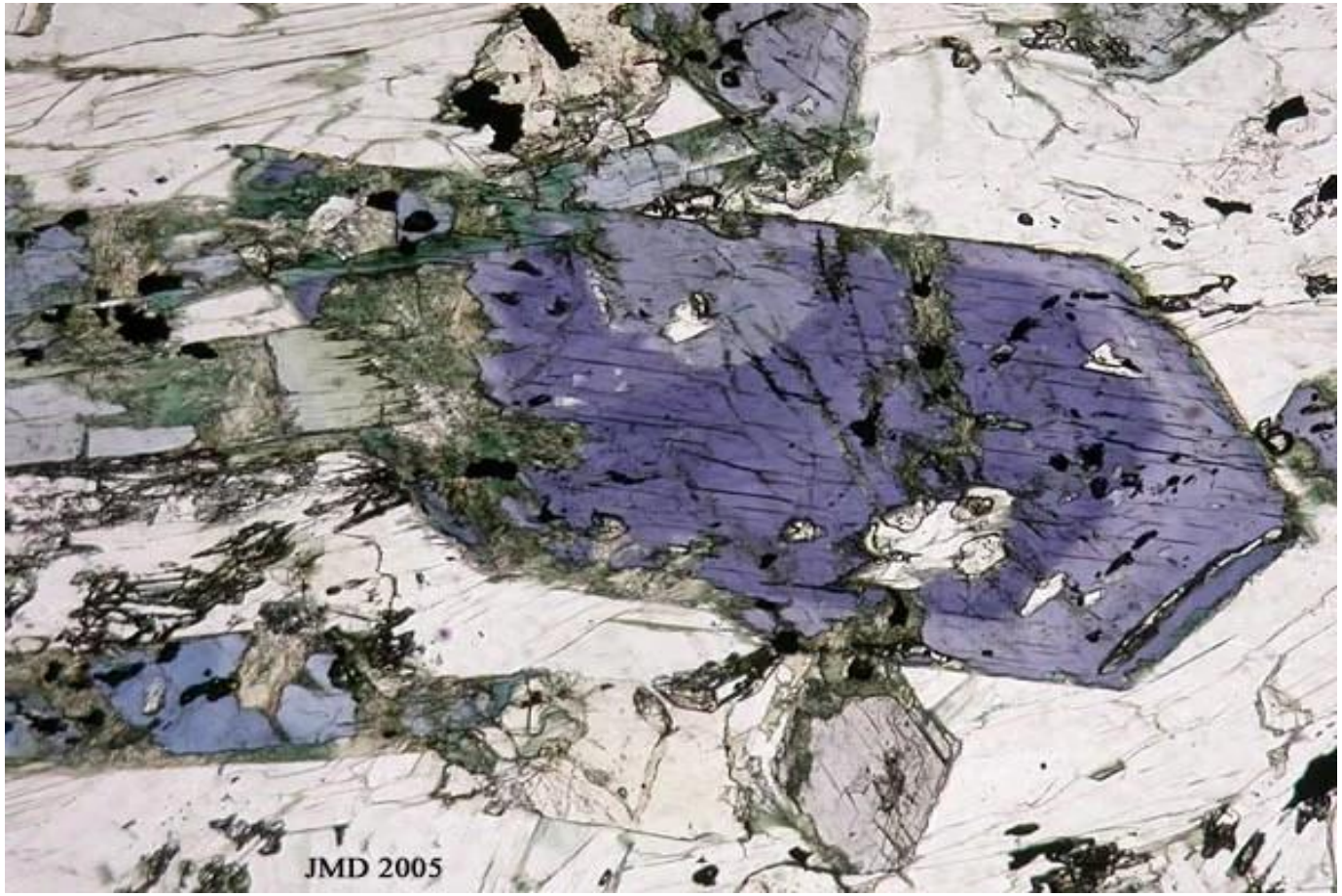


Figura 93: Cristais de Glaucofânio a NC.

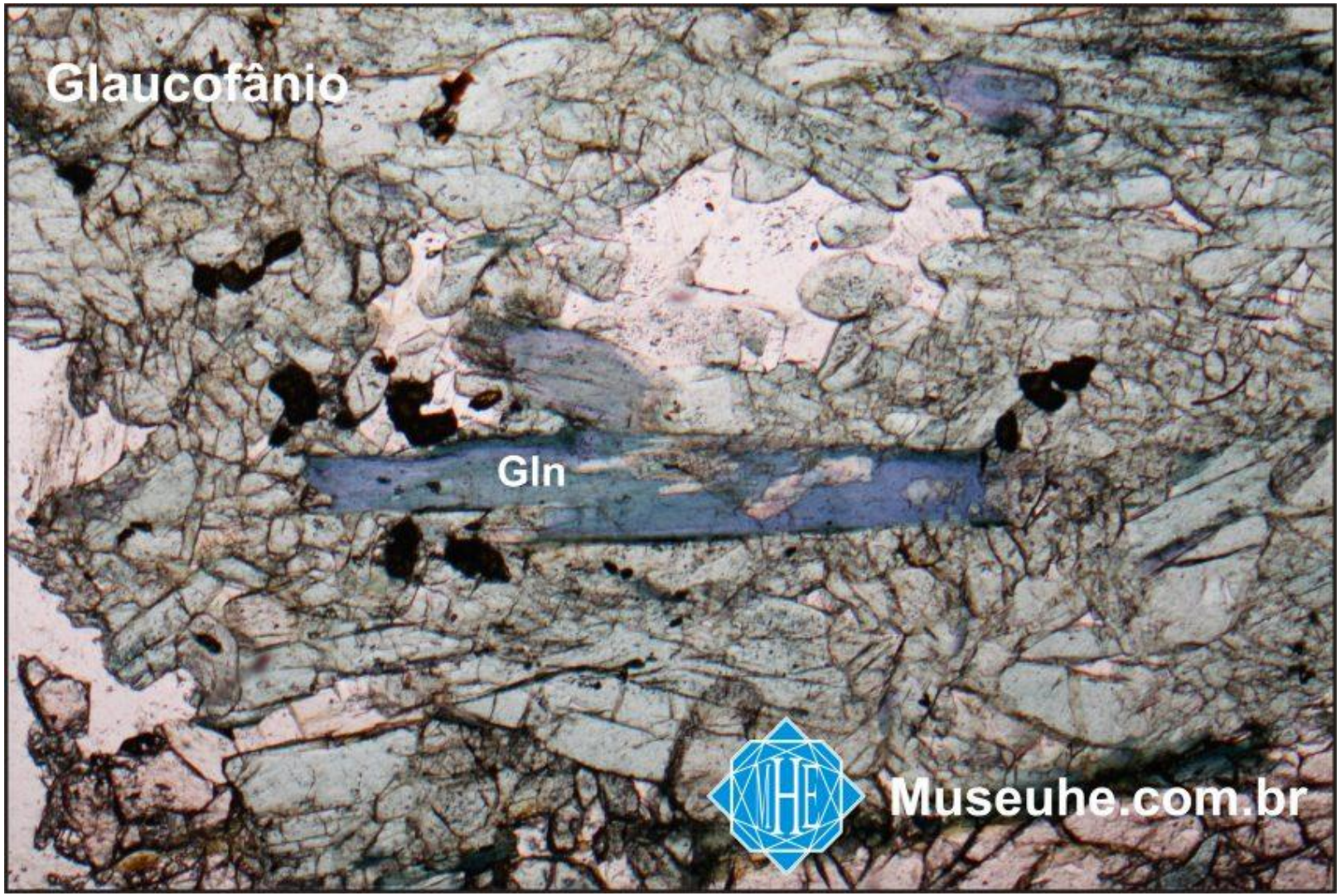


Figura 94: Cristal de Glaucofânio (Gln) **a NC.**

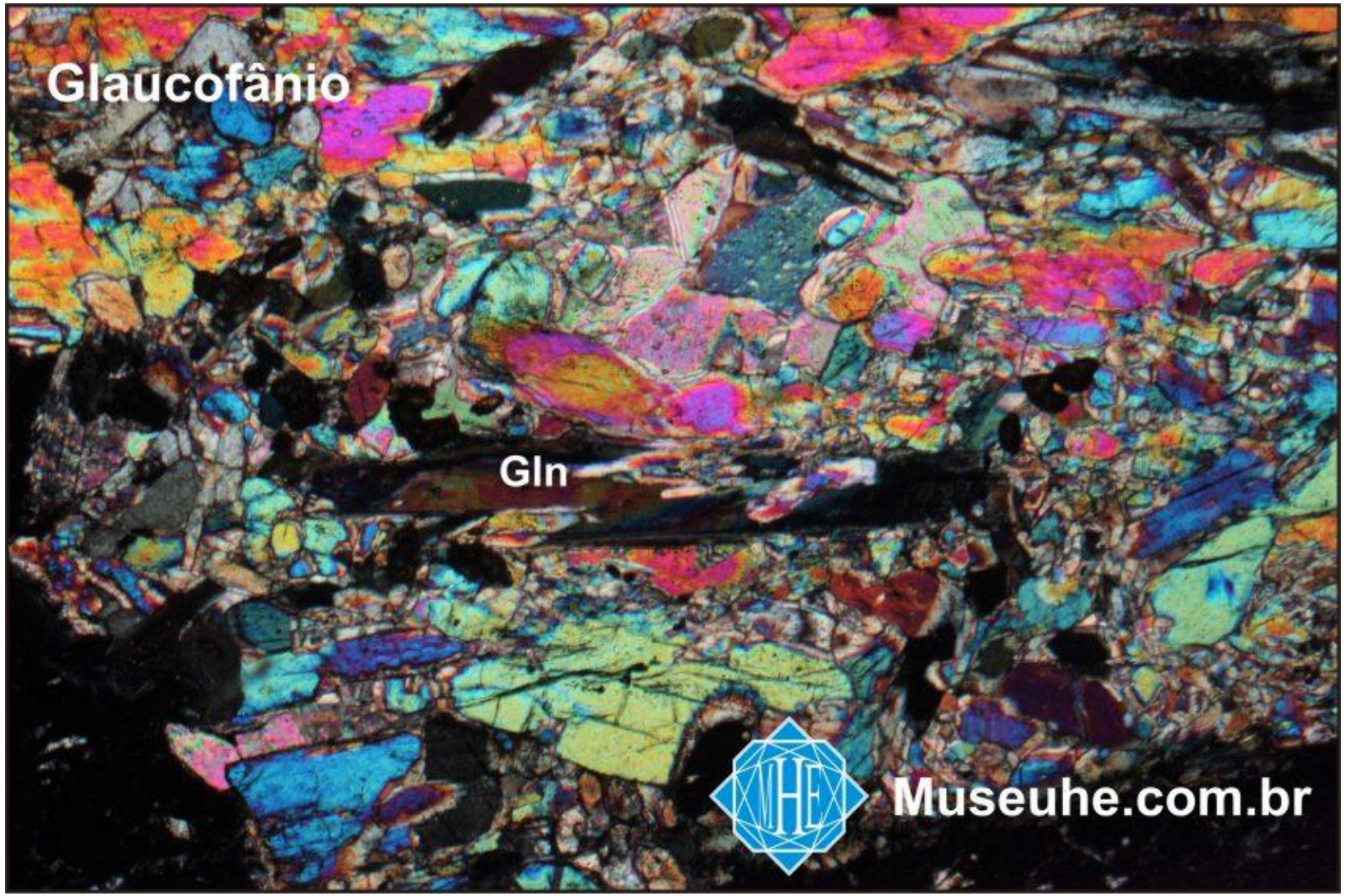


Figura 95: Cristal de Glaucofânio (Gln) **a NX.**

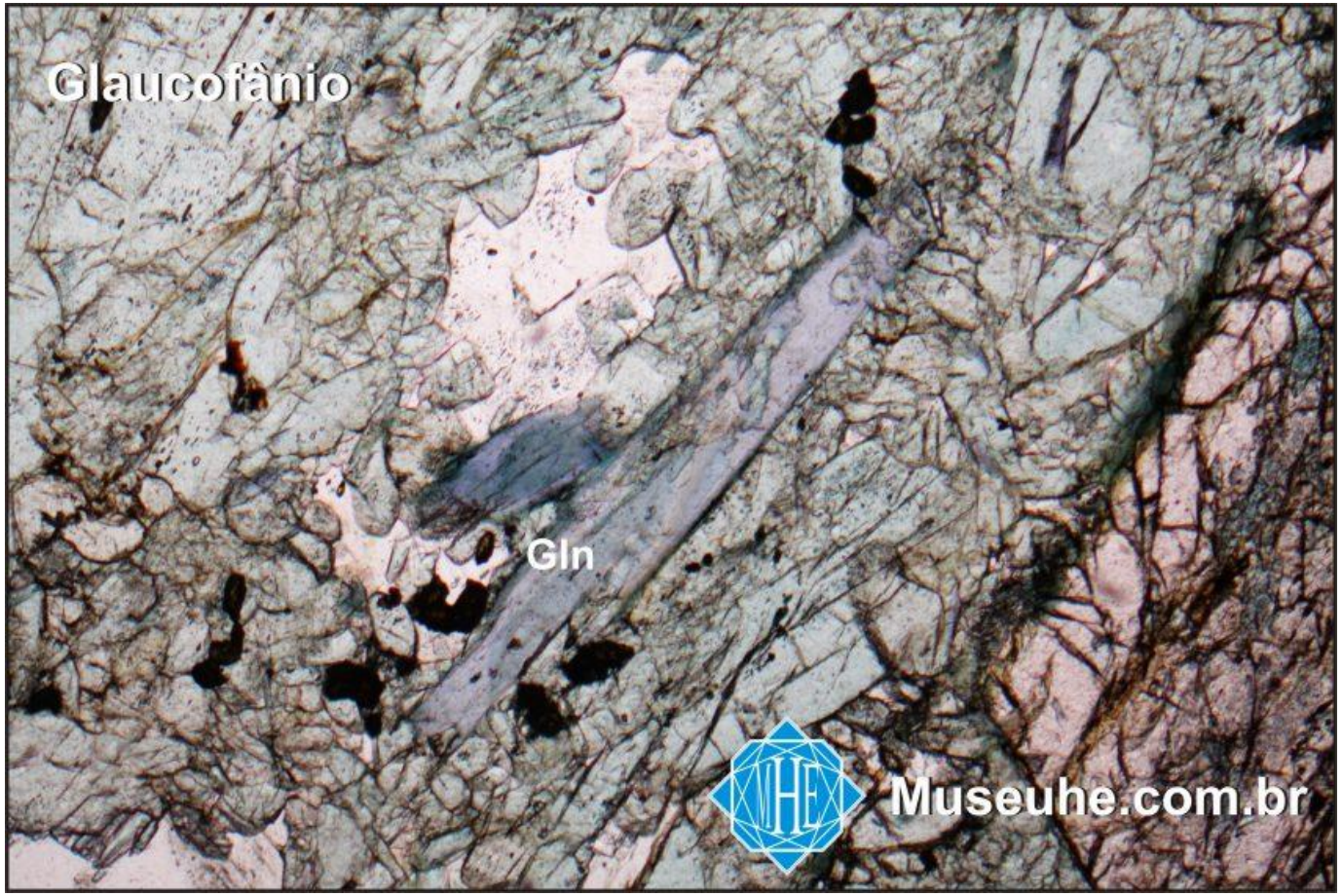


Figura 96: Cristal de Glaucofânio (Gln) **a NC.**

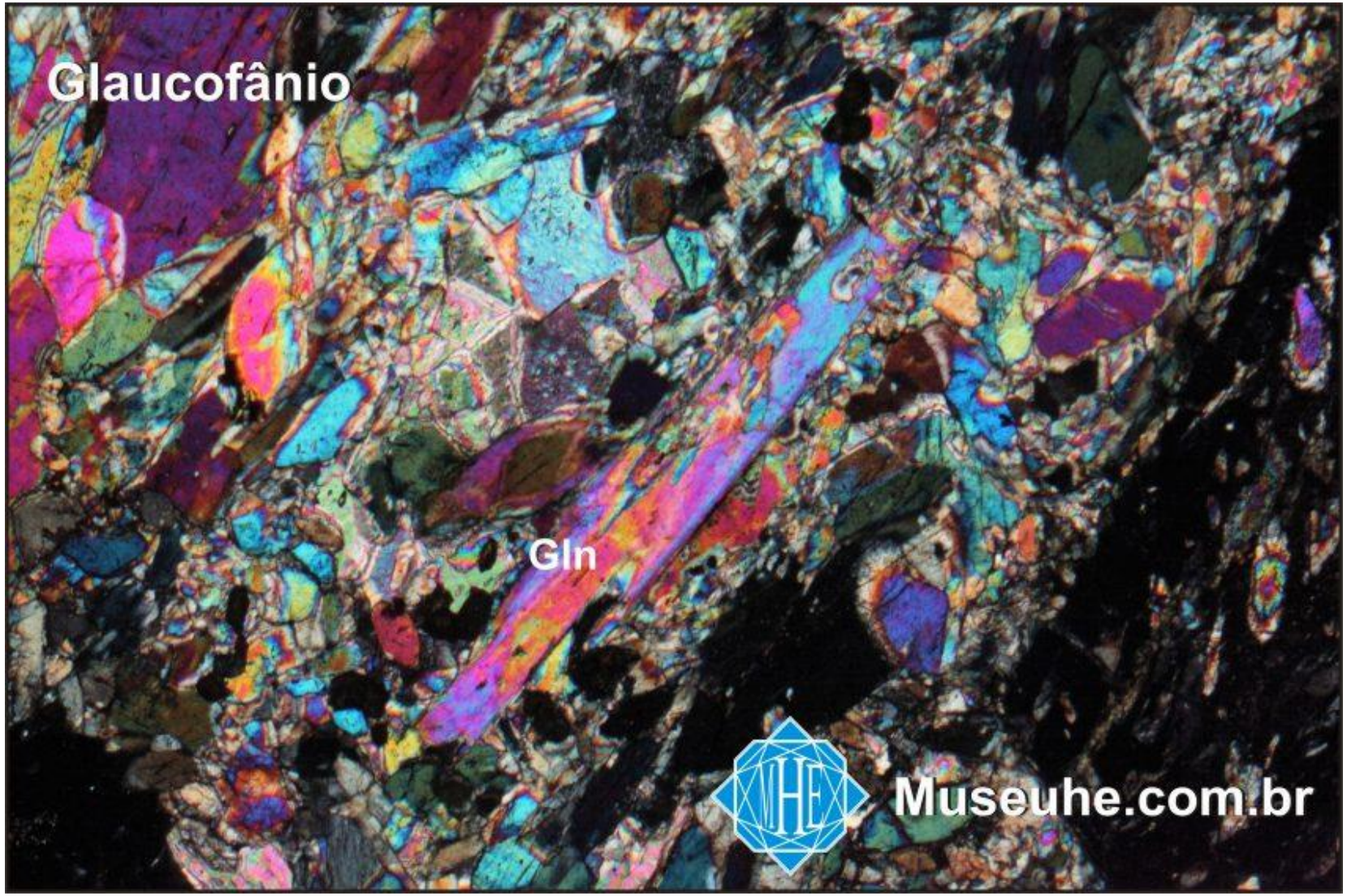


Figura 97: Cristal de Glaucofânio (Gln) **a NX.**

- **Alanita:**

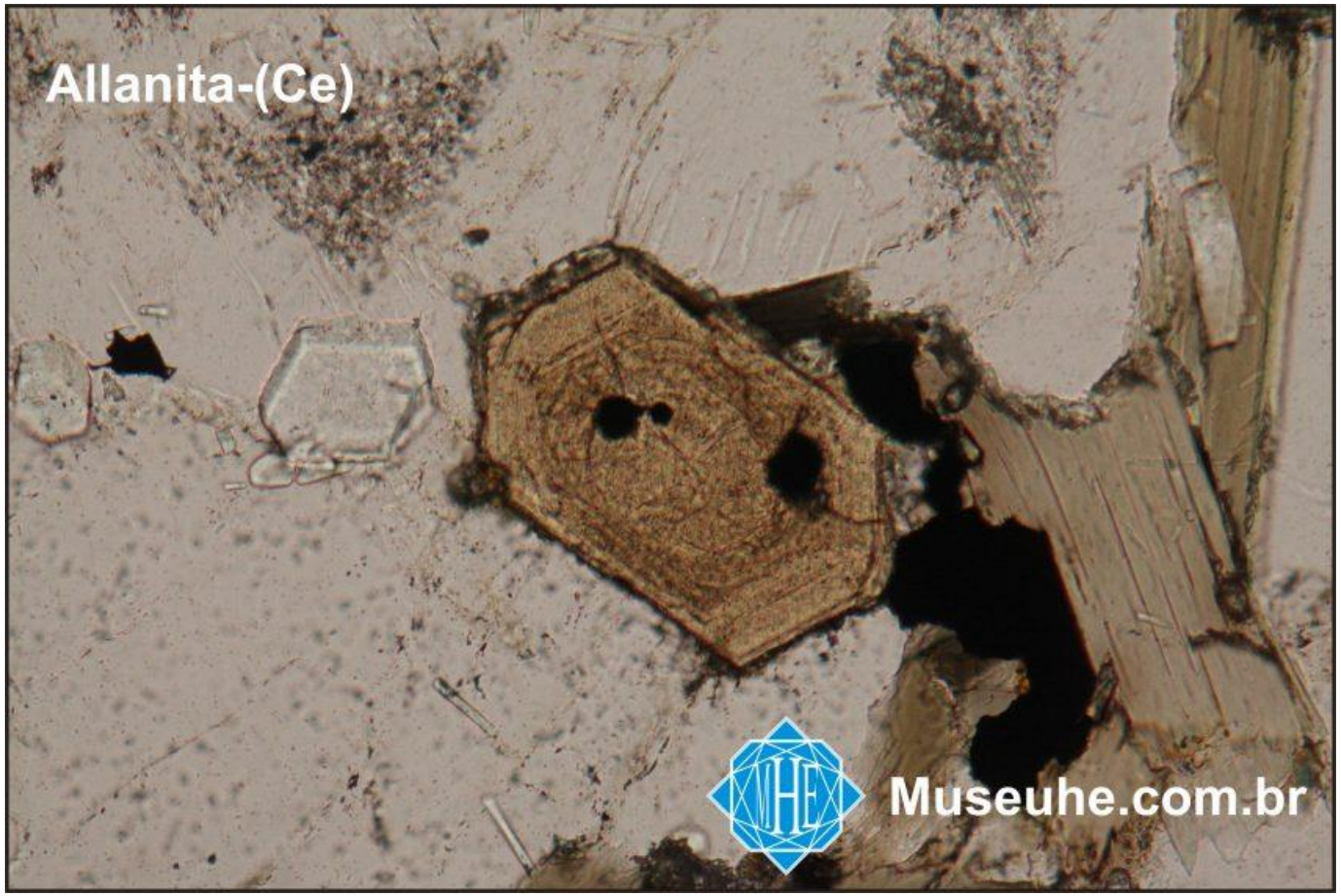


Figura 98: Cristal de Alanita a NC.

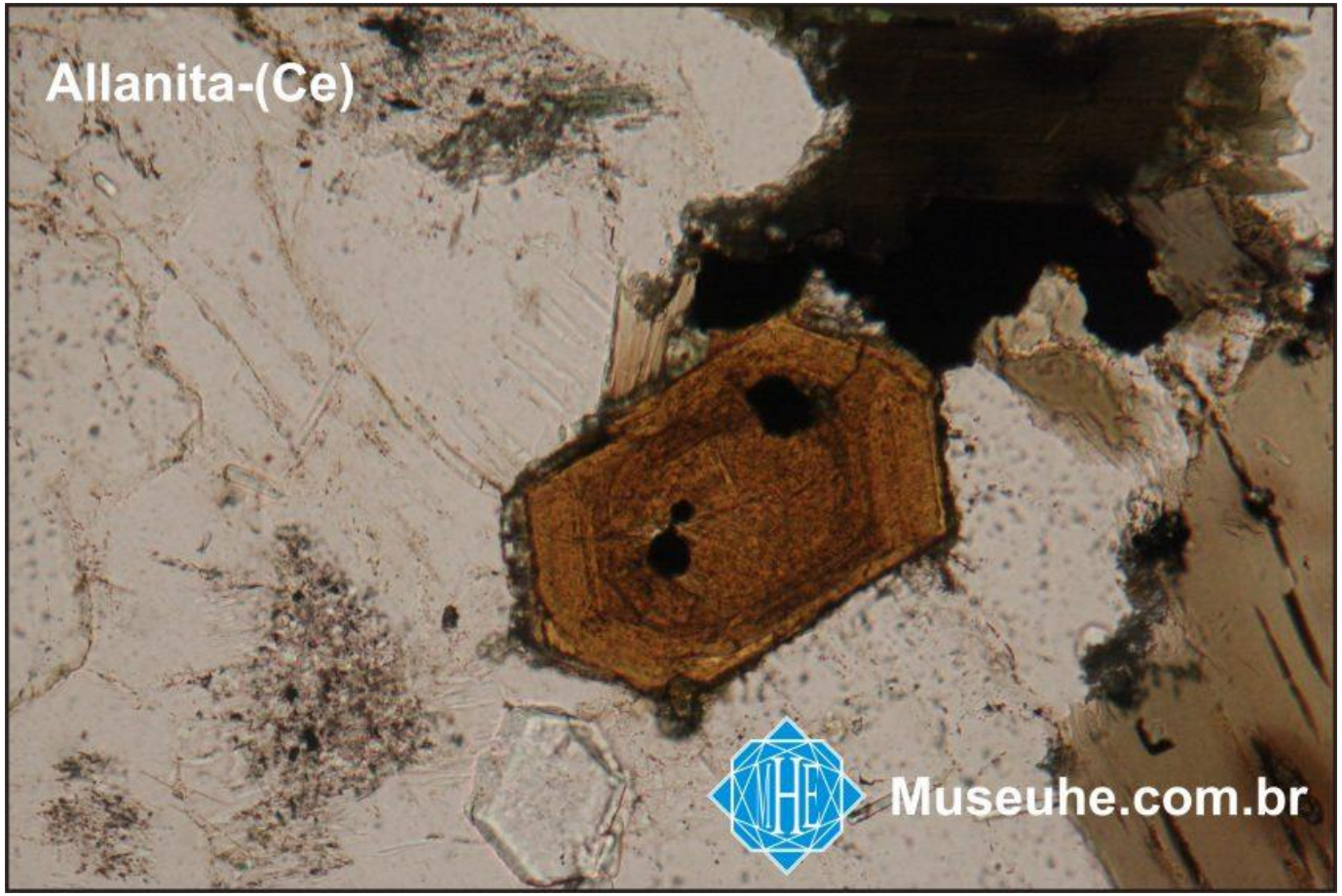


Figura 99: Cristal de Alanita a NC.

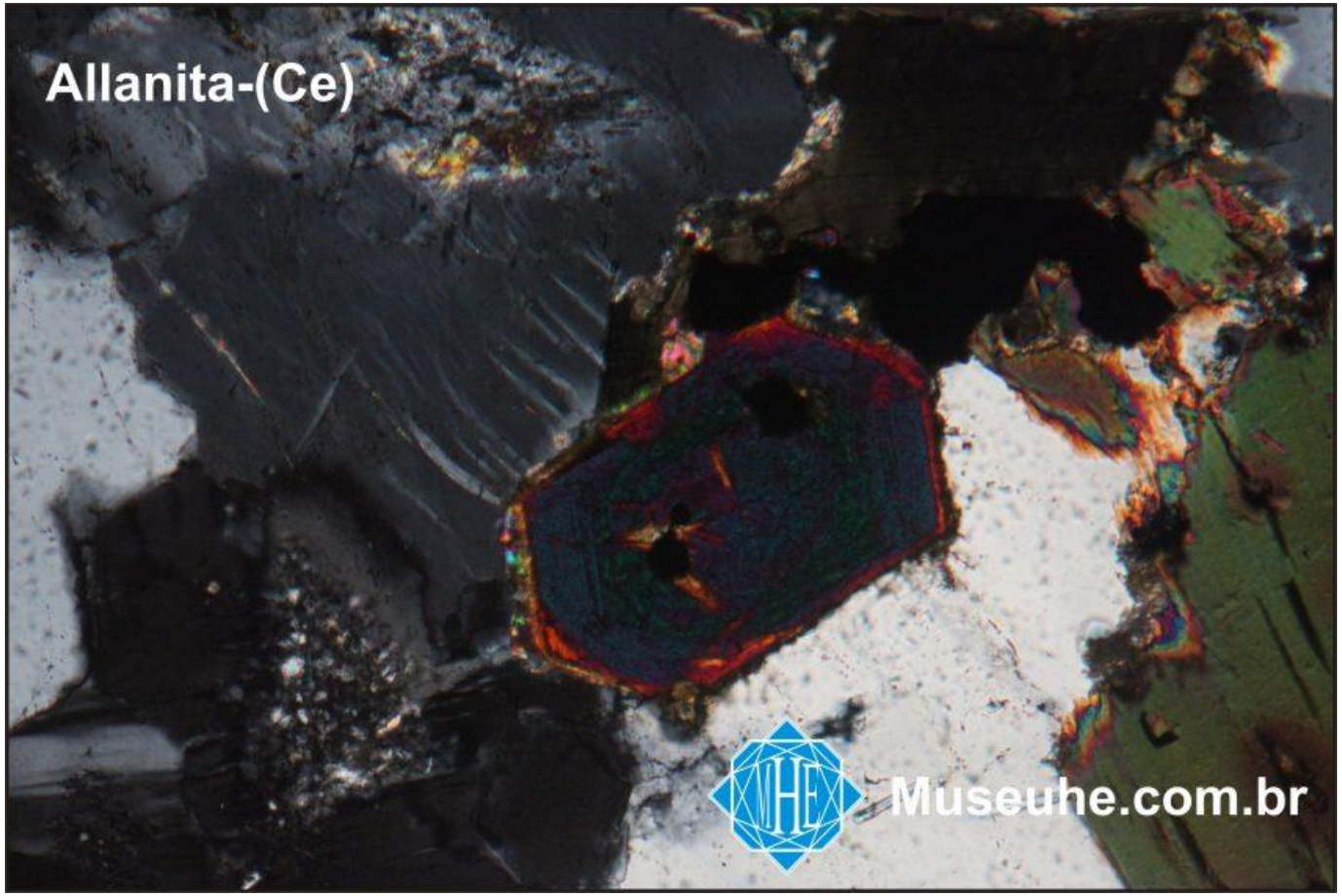


Figura 100: Cristal de Alanita a NX.

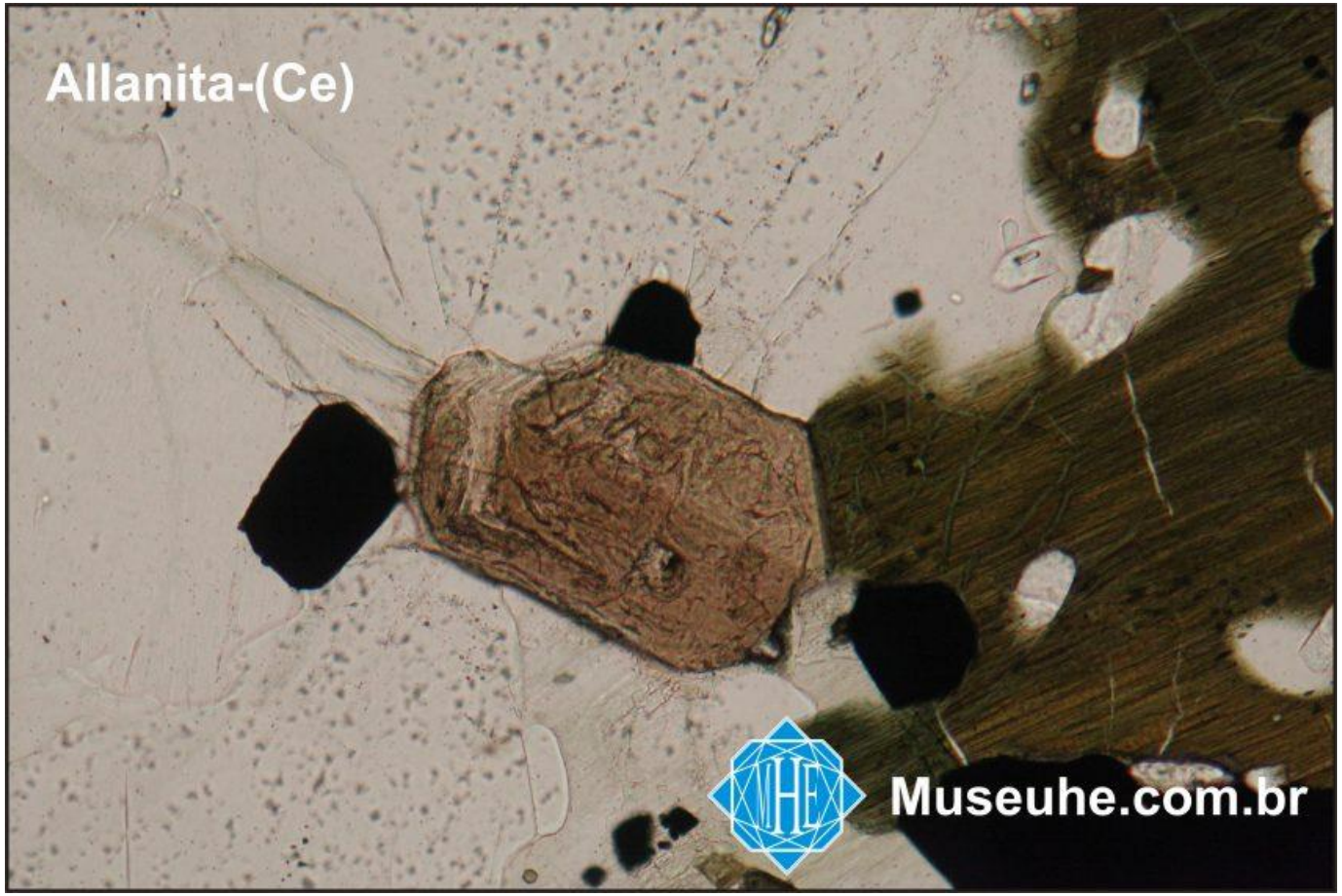


Figura 101: Cristal de Alanita a NC.

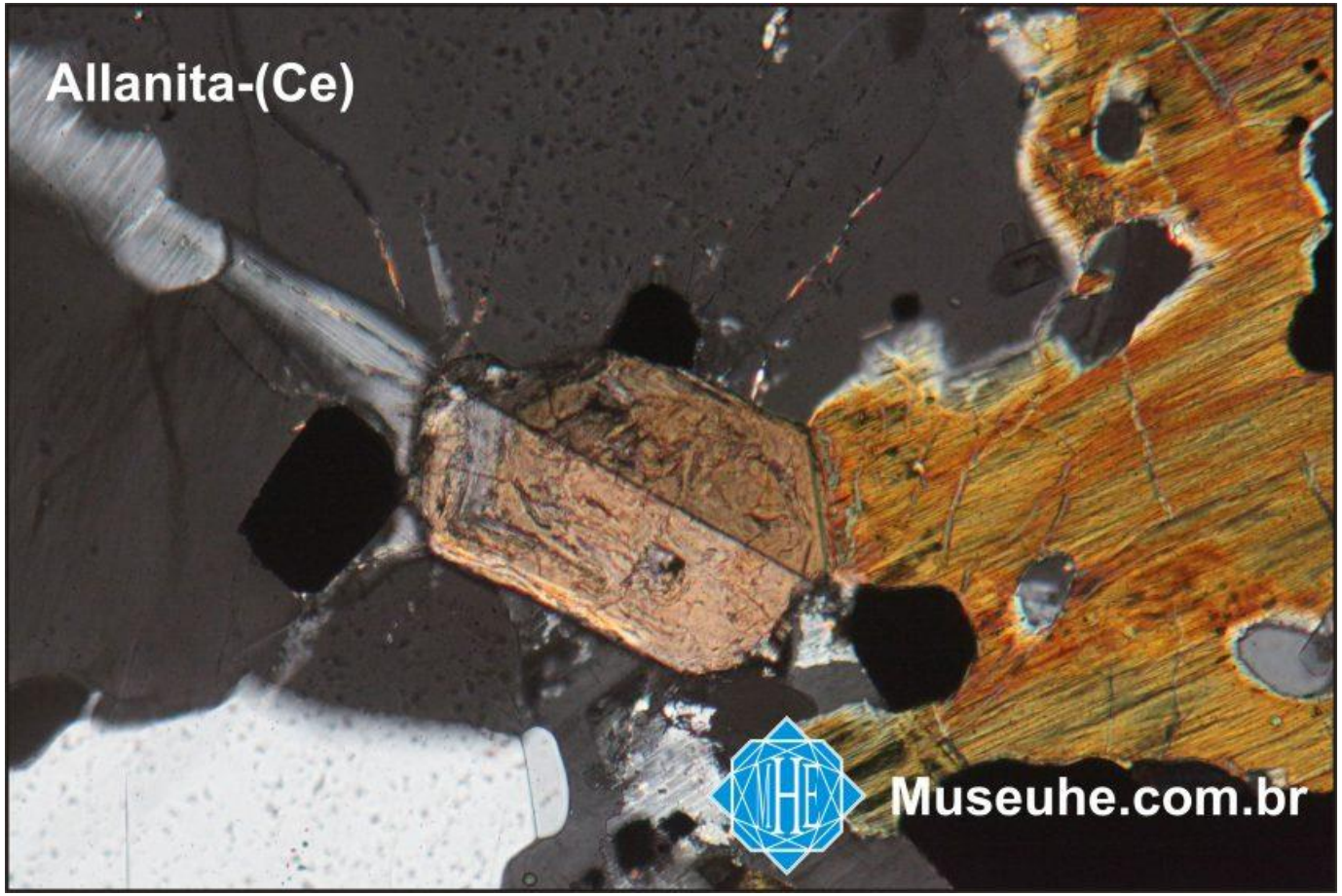


Figura 102: Cristal de Alanita a NX.

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